

The Transcendental Path.
Assumptions and Arguments in Kant's
Transcendental Deduction

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Abstract

This present work addresses Kant's project of transcendental deduction of the pure concepts of understanding with regard to its question, assumptions, and arguments. Unlike many interpreters, I propose that Kant's question in transcendental deduction is meta-semantic in the metaphysical sense. By rejecting all the possible rival theories, Kant convincingly shows the necessity of his Copernican solution and the plausibility of the view of "no necessary connection without necessary instantiation". I argue that Kant develops different lines of arguments in transcendental deduction: the argument from cognition, the argument from self-consciousness, the argument from judgment and the argument from perception, and that all of them are primarily not anti-skeptical, but explanatory in character.

This interpretation of Kant's transcendental deduction reveals how seriously Kant takes his transcendental path to be necessary and why Kant's approach should be viewed as problem-oriented, rather than foundation-motivated.

Die vorliegende Arbeit beschäftigt sich mit Kants Projekt der transzendentalen Deduktion der reinen Verstandesbegriffe hinsichtlich ihrer Fragen, Annahmen, und Argumente. Anders als viele Interpreten schlage ich vor, dass Kants Fragestellung in der transzendentalen Deduktion im metaphysischen Sinne meta-semantisch ist. Indem er alle möglichen konkurrierenden Theorien ablehnt, zeigt Kant überzeugend die Notwendigkeit seiner kopernikanischen Lösung und die Plausibilität der Auffassung von „keiner notwendigen Verknüpfung ohne notwendige Instanziierung“. Ich werde argumentiert, dass Kant verschiedene Argumentationsansätze in der transzendentalen Deduktion entwickelt: das Argument aus der Erkenntnis, das Argument aus dem Selbstbewusstsein, das Argument aus dem Urteil und das Argument aus der Wahrnehmung, und dass sie alle in erster Linie nicht im Wesen anti-skeptisch, sondern erklärend sind.

Diese von mir vorgeschlagene Interpretation von Kants transzendentaler Deduktion zeigt, wie ernst Kant seinen transzendentalen Weg für notwendig hält und warum Kants Ansatz vor allem als problemorientiert, nicht aber als gründungsmotiviert angesehen werden sollte.

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Introduction

(a) The Idea of the Transcendental Deduction

We have a variety of concepts that weave themselves into our experience. Some of them seem remote from reality, such as the fictional concepts “dragon”, “perpetual motion machine”, for we cannot encounter their instances in experience. Some of them seem near to reality, such as the observational concept “panda”, or the theoretical concept “DNA”, for we could find their instances in experience, albeit in different ways. However, some concepts such as “causation” and “necessity” seem stranger; sometimes they seem remote from reality, for we cannot encounter their instances in experience in the way we do in the case of observational and theoretical concepts; yet sometimes they seem near to reality, for we nevertheless cannot help presupposing their existence in experience.

These concepts seem indispensable to the world. We could easily conceive a world *like ours* without a dragon. Indeed, we do not need to beg the counterfactual scenario, since many civil communities do not have the concept “dragon”. Curiously, it seems even more difficult to conceive a world like ours without causation than to conceive a world like ours without panda. The point could be put by a metaphor: we could conceive that a building can stand without a particular building block, which could be missing or replaced by another one; however, we could hardly conceive that a building can stand without its architect structure.

The reasons are complex. First, these concepts are *relational*. They are not those concepts whose objects we could easily pick up. Second, these concepts are *fundamental*. These concepts underlie many ordinary relational concepts like “burning”, “being heavy”. Third, these concepts are *universal*. It seems that any state of affairs in the world could not be described without reference to these concepts. Kant calls these peculiar concepts “the pure concepts of understanding” or “categories”, and he holds that they are the same in kind and limited in number.

In *Critique of Pure Reason*, Kant introduces a pair of legal terms “*quid juris*” and “*quid facti*”, namely, “the questions about what is lawful” and “that which concerns the fact” (A84/B116) to designate the two most important questions concerning the nature of concepts: the *acquisition* of a concept, and the *referential force* of a concept.¹ For the latter question, Kant further borrows the

¹ In fact, the distinction between “*quid juris*” and “*quid facti*” is not always helpful in Kant’s text. When Kant introduces this pair of term, he seems to suggest that they are *respectively* applied to the pure concepts and the empirical concepts. However, it turns out that they constitute a twofold structure of question that is equally applied to both pure concepts and empirical concepts. Moreover, I do not think that the term “*quid juris*” by itself is adequate to indicate that the nature of transcendental deduction is justificatory and normative. As I will mention latter, I do

deduction in legal matter and defines it as “to establish the entitlement or the legal claim” (A84/B116) with respect to its lawfulness. Kant officially defines transcendental deduction as “the explanation of the way in which concepts *a priori* can relate to objects” (A85/B117).

As Henrich remarks, “[t]he Transcendental Deduction of the categories is the very heart of the *Critique of Pure Reason*”.² Indeed, it seems that the status of the Transcendental Deduction can hardly be overestimated. In the Preface to the 1781 *Critique* Kant wrote that “I know of no investigations that would be more important for getting to the bottom of the faculty that we call understanding and at the same time for determining the rules and limits of its employment than those that I have undertaken in the second part of the Transcendental Analytic, under the title of the *Deduction of the Pure Concepts of the Understanding*; they have also cost me the most, but not, I hope, unrewarded effort.” (A xvi)

The body part of the *Critique* could be understood as a project of scrutinizing human cognitive faculties. From the perspective of a theory of faculties, the Transcendental Deduction occupies a central place. This is not because the faculty of understanding is higher than that of sensibility is, nor because the investigation of understanding goes deeper than that of sensibility does. The centrality of the Transcendental Deduction lies in that it is designed to be the *bridging* part between his theory of sensibility and that of understanding. Not only does it contain an extension of his investigation of understanding in the Metaphysical Deduction in the form of its metaphysical use,³ but it also contains an important supplement account of his previous doctrine of sensibility in the Aesthetic with respect to the singularity of space and time.

In another place, Kant credits the question of transcendental deduction as the “the key to the whole secret of metaphysics” (AA 10:130). The question of the grounding relation of representation to object assumes a *supreme* status in all metaphysical questions. The formulation of the question marks the emergence of a secure course of metaphysics, and the answer to the question brings about decisive influences on the solution to almost *all other hard questions* in metaphysics: the synthetic *a priori* truths, the antinomies, the necessary connection of objects, personal identity, etc.

The Transcendental deduction is difficult because “a difficulty is revealed here that we did not encounter in the field of sensibility, namely **how subjective conditions of thinking** should have **objective validity**, i.e., yield conditions of the possibility of all cognition of objects” (A89-

not think that Kant’s term “explanation” alone could make a case for an explanatory reading of transcendental deduction, either. Rather, the nature of transcendental deduction as argument depends on what Kant actually does.

² Henrich 1969, 640.

³ For a valuable introduction to the Metaphysical Deduction see Longuenesse 2006.

90/B122). Kant holds that the difficulty of transcendental deduction lies in that we cannot preclude the logical possibility that the concepts as subjective thinking could be *empty and uninstantiated* without being related to the world. Yet, I think that the genuine difficulty goes deeper: to pose the question of how a concept could be a part of the world is simply to make a *categorical mistake*. A concept cannot become a part of the world, because we cannot force a member of the system of concepts to be a member of the system of things. Space and time are no concepts, so there is no difficulty for them to be a part of the world. Categories are concepts, so the difficulty arises.⁴

(b) The Metaphysical Reading Recommended

The present work is a study of Kant's transcendental deduction of categories in regard to its *assumptions* and *arguments*. It is not primarily a study of the Metaphysical Deduction or Principles, though I will make reference to them when I find it necessary. It is not a study of the question as to the relationship between sensibility and understanding, which has drawn the primary interest in the form of the dispute between conceptualism and non-conceptualism in recent years.⁵ Rather, my study presupposes that conceptualism is correct.⁶ The primary aim of this study is to examine the nature of the arguments in the Transcendental Deduction and the hidden assumptions that motivate these arguments.

In this work, I will embrace a metaphysical, rather than an epistemological, reading of the Transcendental Deduction. The metaphysical reading of the *Critique* has a long tradition.⁷ While the metaphysical reading was one of the mainstream views of the ways of reading the *Critique*, it was largely overlooked in the wake of the Kant renaissance in the 1960s. For instance, Strawson famously proposes that we should isolate Kant's analytic arguments from his transcendental idealism.⁸ The eager to *purify* Kant from the contaminating metaphysics is nothing but a symptom

⁴ See my discussion of the schema in Chapter 5.

⁵ Many recent studies on transcendental deduction take the conceptualism debate as a primary challenge. See Vinci 2014 and Schulting 2017.

⁶ The Transcendental Deduction is usually viewed as providing key supports to the conceptualist reading of Kant's mental states. See Griffith 2012, Gomes 2013, Landers 2015. In a valuable review, McLear also recognizes that transcendental deduction is often invoked by conceptualists. See McLear 2014.

⁷ Due to the neo-Kantians, the dominant reading of the *Critique* has long been epistemological. From the twenties of last century onwards, however, a strong trend of metaphysical reading has begun to be felt in Germany. The contributors includes not only some of the most famous historians of philosophy such as Marx Wundt (1924) and Heinz Heimsoeth (1956), but also some of the most leading philosophers such as Martin Heidegger (1929) and Nicolai Hartmann (1921). The reevaluation of the nature of the *Critique* is, albeit not merely, a symptom of the philosophical turns in the early decades of the twentieth century.

⁸ For more details see Strawson 1966, 5-7. For instance, Strawson writes explicitly that "[t]he doctrines of transcendental idealism, and the associated picture of the receiving and ordering apparatus of the mind producing Nature as we know it out of the unknowable reality of things as they are in themselves, are undoubtedly the chief obstacles to a sympathetic understanding of the *Critique*." (2002, 6)

in the history of philosophy of the general hostility to metaphysics traced back to the logical empiricism and ordinary language school. Thanks to W.V.O. Quine and David Lewis, now philosophers feel free to adopt the more liberal forms of metaphysics. In recent years, a number of new metaphysical readings have flourished in interpreting transcendental idealism.⁹ One might expect that the more friendly metaphysical reading could yield more profitable results in other topics.

What I will do here is to argue for its sub-thesis that the Transcendental Deduction is primarily metaphysical in character. Indeed, the issue of the relation of representation (cognition) to object seems to encourage an epistemological question. Kant's investigation into the cognitive faculties also looks like nothing more than a study of the source of knowledge. However, there are important reasons to hold that a metaphysical reading does more justice to and makes better sense of Kant's Transcendental Deduction. The widespread use of representation, cognition, and faculty at most offers the *subject matter* of the study. It does not immediately justify the epistemological nature of the Transcendental Deduction. What matters is the nature of the question concerning the subject matter and the way the question is approached. Even if the subject matter is knowledge, it does not imply that any study of it is epistemological in nature; rather, we are justified to have a metaphysics of knowledge.¹⁰ The dismissal of the metaphysical reading even results in the inconsistency of the notion of metaphysics itself: when the laws of nature are legislated by God, it is undoubtedly a proper metaphysics; when the laws of nature are legislated by the human understanding, it becomes a shameful psychology.¹¹

In the *Critique*, Kant officially defines the transcendental deduction of pure concepts as "the explanation of the way in which concepts *a priori* can relate to objects" (A85/B117). Kant does not immediately pose a metaphysical question as to whether there is necessary connection in the world, or how it is possible for there to be necessary connection in the world. Rather, Kant articulates the question with a survey of concepts, and it seems to suggest that Kant would like to retain a semantic dimension in his approach to the question.¹² As Kant further indicates, the question that the

⁹ This new metaphysical reading is known as the metaphysical two-aspect view. See Langton 1998, Allais 2007, Rosefeldt 2007.

¹⁰ See Hossack 2007.

¹¹ There is no denying that there is a number of psychological details in the A-Deduction when Kant accounts for how the experiences are made possible by categories. However, Kant soon takes notice of it and he claims that those details are not essential to the aim of the Transcendental Deduction. Therefore, Kant draws a clear-cut distinction between psychology and philosophy and introduces reproduction and association in a merely contrastive context.

¹² For the broad semantic approach to the *Critique* see Hanna 2001. Hanna proposes that the *Critique* is concerned with cognitive semantics, and he believes that it is a reading that synthesizes the one-sided logico-semantic reading and philosophical-psychological reading. Later I will argue that there are two distinct levels in Kant's theoretical philosophy in general and transcendental deduction in particular. On the surface level, it is concerned with the semantic question of the representation of object. But this semantic level has to be grounded in a deeper meta-

Transcendental Deduction attempts to address is not so much the relation of representation to object as the *ground* of the relation of representation to object. Therefore, I argue that the nature of Kant's puzzle is metaphysical in character. As Kant's the solution to the puzzle, the Copernican Revolution is essentially to articulate a new grounding model of the relation of representation of object. Furthermore, Kant takes the question as the secret of all systems of metaphysics. It turns out that the resolution of the secret has global ramifications for a variety of other metaphysical questions, most notably the synthetic *a priori* truths and the mathematical antinomies. (Others include the necessary connection of objects, the identity of self-consciousness, the synthetic contingent truth, and the unity of space, etc.) Finally, Kant deeply clings to a variety of largely metaphysical assumptions such that the motivations and constraints of Kant's solution to his puzzle are metaphysical. For instance, Kant believes that the semantic notions of truth, reference and predication must be causally grounded.

(c) The Lines of Argument

On my reading, the Transcendental Deduction consists of a variety of lines of argument, each of which draws on different theoretical and conceptual resources. The arguments in the Transcendental Deduction could be divided into the argument from cognition, the argument from self-consciousness, the argument from judgment, and the argument from perception.¹³

To separate different and independent lines of arguments has a twofold motivation. On the one hand, it is required by the fact that Kant writes *different* versions of arguments for the deduction of categories. While Kant insists that the difference “concerns only the manner of presentation, and not the ground of explanation” (AA 4:476), it is precisely the different presentations of Kant's project of transcendental deduction that is brought under scrutiny. On the other hand, it helps maximally exploit the potential of each argument. For instance, if we take seriously Kant's abstraction strategy in the B-Deduction, one consequence is that, on my reading, the first part of the B-Deduction makes an indirect, if not trivial, contribution to the second part of the B-Deduction. If we retain the independence of the argument from self-consciousness in the B-

semantical level, on which Kant is concerned with the *metaphysical ground* of certain semantic facts such as *a priori* reference or synthetic *a priori* truths. On my reading, the semantic question is addressed properly in Kant's *Logic*, yet the further metaphysical question is the genuine preoccupation of *Critique*. For the semantic reading of Transcendental Deduction and especially the synthetic unity of transcendental apperception see Dickerson 2003. Dickerson argues that the question of the unity of the manifold in Kant is a representational parallel of the question of the unity of proposition in early analytic philosophy. In Chapter 6 I will suggest that this reading is misleading, since on the one hand, not all intuitions are propositional, and, on the other hand, the unity of judgment is not a problem at all for Kant.

¹³ There are other ways of reading the lines of arguments in the Deduction. See Pereboom 1995.

Deduction and read it as a successor argument for the argument from above in the A-Deduction independently of the strategic context, we do not worry that the respect of Kant's official claims on his strategy would undermine the expected utmost importance of the argument from self-consciousness.

According to my interpretation, all of the four lines of arguments share a common two-phase structure.¹⁴ In the first phase of argument, Kant starts his argument from different acknowledged facts and it turns out that all the arguments from these different premises are convergent to the *a priori* synthetic unity. In the second phase of argument, Kant proceeds from the *a priori* synthetic unity through the synthesis to the category. We might consider a premise of the argument as the *entrance* to the *a priori* synthetic unity, or to the transcendental path. Therefore, we have different entrances to the same destination.

Since in the first phase different arguments take different routes, I will concentrate on the first phase of *every* argument for synthetic unity. As we will see, the *a priori* synthetic unity is a more specific expression of *a priori* determination, and the atemporalized expression of the transcendental schema. In fact, one central difficulty of Kant's arguments is how to uncover the synthetic unity from different phenomena. Since in the second phase every argument takes a common route, I will discuss the second phase of the argument for category only in *some* argument. The second phase of the arguments could be understood as *how* the categories make the objects possible. Construed in this light, my strategy could be further justified by Kant's remark that "the answer to the question **how** the categories make such experience possible is important enough for *completing* the deduction where possible, with respect to the principal end of the system, namely, the determination of the limits of pure reason, it is in no way *compulsory*, but merely *meritorious*." (AA 4:474f) Compared to the arguments for the transcendental path, the specific arguments in the Transcendental Deduction are indeed *not* essential to Kant's purpose.

(d) Anti-Skepticism

It was widely believed that the *Critique* in general and the Transcendental Deduction in particular are committed to the anti-skeptical project. The anti-skeptical reading of the *Critique* was once the dominant and almost the only correct interpretation, which was once powerfully defended and developed by the most notable Kant scholars such as Strawson, Bennett, and Wolff.¹⁵ It is fair

¹⁴ This general two-phases reading should be distinguished from the two-part structure in the B-Deduction.

¹⁵ See Strawson 1966, Bennett 1966, and Wolff 1963. For criticisms see Ameriks 1978.

to say that the renaissance of Kant study in English-speaking countries is closely associated with the promise of *Critique's* anti-skeptical potential that is felt by these pioneers. Even today many still hold that the *Critique* is organized by a variety of responses to skepticism.¹⁶ For some of them, to address skepticism and to develop a reformed metaphysics are two sides of the same coin.¹⁷ This traditional dominant interpretation decisively creates the atmosphere in which the Transcendental Deduction is studied. Some of the most important interpretations of the arguments in the Transcendental Deduction made by Henrich and Guyer assume that the various arguments Kant develops contain the element of or serve the aim of anti-skepticism.

However, I believe that this view is mistaken, and the arguments in the Transcendental Deduction are not primarily skeptical. There are different interpretations for rejecting an anti-skeptical reading. According to one line of interpretation, Kant *cannot* refute Hume. Watkins argues that Kant's model of causation is different from that of Hume. Since there is no commensurability between the two models, Kant is not in a position to refute Hume.¹⁸ I think that the incomparability is too strong since it deprives all possible sensible response to the Humean skepticism of the entire *Critique*.¹⁹

I would rather pursue another moderate line of interpretation, according to which Kant *need* not refute the Humean skepticism in the Transcendental Deduction.²⁰ In my view, a campaign against the Humean skepticism is a concern of the *Critique*. On Kant's own construal, he both need and can successfully refute Hume. Yet, it is not a concern of the *Transcendental Deduction*. Before Kant gets his deduction off the ground, the Humean variant of skepticism has been discharged.²¹ What Kant is doing in Deduction is taking a further step to give an alternative account of the causation in particular and real connection in general.²² Therefore, Kant's response consists of a negative and a positive part. Kant first raises *separate* and *anterior* arguments to refute the Humean skepticism by the counterexample of mathematics and then develops a positive alternative account in the Deduction. While Kant's positive account could be seen as a *response* to skepticism in the

¹⁶ The most systematic efforts are made by Forster 2008 and Guyer 2008.

¹⁷ See Forster 2008. This idea is even not without trace in Strawson 1966.

¹⁸ See Watkins 2005, 230-297.

¹⁹ For an objection to the exclusion of any event-based model of causation from Kant see Chignell and Pereboom 2010.

²⁰ See Engstrom 1994.

²¹ It is no doubt that Kant does offer an argument from mathematics against Humean skepticism. Whether the argument is successful or not is quite another issue. In his refutation, Kant are committed to the following two assumptions: (1) mathematics is synthetic a priori, and (2) stands or falls together. The first assumption is of more interest, what it reflects is not so much the specific difference on the nature of mathematics as the methodological divergence in response to knowledge in general. For the former assumption see Chapter 2.

²² The 1787 *Critique* is not a complement, but a replacement of the 1781 *Critique*.

broad sense, yet it could hardly be qualified as a *refutation*, since the refutation is *presupposed*, rather than *implied*.²³

I maintain that an anti-skeptical reading does not do justice to Kant's arguments. One striking fact is that the premises of the arguments in the Transcendental Deduction suggest that they are not anti-skeptical in nature. As I have noted, Kant develops different lines of arguments for the reality of categories. Kant's arguments start with cognition, self-consciousness, judgment, and perception. However, most of the premises are too strong to be acceptable by the skeptics, and only the argument from self-consciousness might be qualified as a promising anti-skeptical argument. The thickness of these premises leaves an anti-skeptical reading unmotivated.

The anti-skeptical reading is extraordinarily uncharitable to Kant. According to the anti-skeptical reading, a number of Kant's arguments simply beg the question of the skeptics in one way or another.²⁴ In addition, if Kant's arguments are intended to target at the Humean skepticism, Kant should start with the premises, with which the Humeans must be ready to agree. By starting with the thick premises Kant seems to have no idea of Humeans' point at all. Finally, it implicitly throws Kant into a dilemma, in which either horn is undesirable: if the Transcendental Deduction is anti-skeptical, then it is question-begging; if it is not, then it is trivial. On either horn the polemical force of the Transcendental Deduction is entirely cast into doubt. In confrontation with the arguments with thick premises, the natural and charitable move is not to insist on the anti-skeptical reading and to conclude that Kant must be wrong in begging the question of the skeptics, but to think about whether the anti-skepticism is still charitable and profitable for understanding the character of Kant's arguments.

However, it does not imply that the Transcendental Deduction cannot be anti-skeptical at any rate. As we will see, I take the arguments to be primarily explanatory. The explanatory reading prefers thicker premises, whereas the anti-skeptical reading requires thinner premises. It leaves open to the possibility that a regressive argument can become anti-skeptical if its premise happens to be accepted by the skeptics.

In a broad sense, the Transcendental Deduction could also be interpreted as anti-skeptical. Skepticism could be defined as the negation of the knowledge with regard to some domain of objects. Where there is a claim to knowledge, there can be a correspondent species of skepticism in virtue of its negating the claim to knowledge. As long as the conclusion of the Transcendental

²³ For a recent defense of the anti-skeptical reading of the *Critique* see Guyer 2008. Guyer complains that the anti-skepticism should not be understood too narrowly by denying its logical validity.

²⁴ The question-begging objection is repeatedly raised by Guyer 1987.

Deduction makes claim to the knowledge of the validity of categories, it could be read as a kind of anti-skepticism against the opponent to its claim. However, this conception of anti-skepticism is trivial and uninteresting.

(e) Toward an Explanatory Reading

I propose that the arguments in the Deduction are primarily explanatory. This reading is not entirely new, since it is closely related to Ameriks' regressive reading, which has long been an important alternative to the anti-skeptical reading. In an influential article, Ameriks arouses the new interest in the question of the nature of the argument in the Transcendental Deduction by arguing that the argument in the Transcendental Deduction is not anti-skeptical in nature.²⁵

In response to the anti-skeptical reading, Ameriks introduces and popularizes the distinction between the progressive and regressive reading of the arguments in the *Critique*, which shapes the basic landscape of the debate about the nature of the argument in the Transcendental Deduction. The divergence between the two readings is rooted in the different ways of evaluating the role of skepticism in the Transcendental Deduction. According to Ameriks, an argument is progressive if it argues from the preconditions of knowledge to knowledge, and an argument is regressive if it argues from the knowledge to the preconditions of knowledge. In other words, the progressive argument supplies the sufficient condition of knowledge, whereas the regressive argument supplies the necessary condition for of knowledge. Ameriks seems to suggest that the progressive and the regressive reading of the Transcendental Deduction are mutually exclusive and jointly exhaustive.

While Ameriks is correct in pointing out that the argument in the Transcendental Deduction is not primarily anti-skeptical in character, and that it is regressive by proceeding from a body of knowledge to the preconditions of the knowledge, I think that his specific proposal leaves open to several objections. First, the scope of knowledge that is to be explained is too narrow. An argument from empirical knowledge that the skeptics call into question is not the only way for an argument

²⁵ See Ameriks 1978. Ameriks' regressive reading of Transcendental Deduction is motivated by the fact that the argument from geometry in the Transcendental Aesthetic is a paradigmatic regressive argument. It is profitable to think that the argument in the Transcendental Deduction parallels the argument from geometry in its structure and aim. Therefore, the argument in the Transcendental Deduction is also an argument from the actuality of synthetic a priori propositions. One could level the criticism to the Transcendental Aesthetic on which Ameriks' basic idea relies so much by arguing that the argument from geometry is only a product in the 1783 *Prolegomena to any Future Metaphysics That will be Able to Come Forward as Science* (abbreviated as *Prolegomena* thereafter), which is known as presented in a regressive manner. It is unfounded to infer that the argument in B-Deduction is also regressive, since that argument from self-consciousness is taken over not from the *Prolegomena*, but from the argument from above in the 1781 *Critique*, which is equally known as organized in a progressive manner. I suggest we should turn to the Transcendental Deduction to see what Kant really *does in text* without expecting too much the hypothetical structural similarity in argument.

to be regressive. As I have mentioned, there are many lines of argument with different premises. I believe that all of the arguments are regressive, and the argument from empirical knowledge is merely one of them. The regressive reading is applicable even to the argument from self-consciousness, which is widely regarded as one paradigmatic anti-skeptical argument. Confined by the argument from empirical knowledge of object, Ameriks does not even worry that a regressive argument *might* be anti-skeptical. For Ameriks, the notion of the regressive argument is simply co-extensive with that of the anti-skeptical argument.

Second, no such argument from empirical knowledge could even be found in Kant's B-Deduction²⁶ While Ameriks is inspired by the argument from geometry in Transcendental Aesthetic, he correctly does not identify the argument in the Transcendental Deduction also as starting from synthetic *a priori* propositions. Rather, he holds that the argument is premised with empirical knowledge. While this kind of argument is present in A-Deduction and known as the argument from below, no such argument could be found in B-Deduction, which is precisely Ameriks' target-text. In addition, Ameriks contends that self-consciousness is derived as the necessary condition from empirical knowledge. However, I believe that self-consciousness is the premise of Kant's master argument in B-Deduction. On this point, the followers of anti-skepticism reading are correct.

In spite of his rejection of the anti-skeptical reading, I think that Ameriks is still committed to the agenda that is set by his opponents. According to the agenda, the central issue in the Transcendental Deduction concerns the relationship between *a priori* self-knowledge and the empirical knowledge of object: either the self-knowledge is derived from the empirical knowledge possible, or vice versa. In his interpretation of the argument in the Transcendental Deduction, Ameriks misidentifies the regressive argument as the argument that runs in an opposite direction to the anti-skeptical reading, namely, the one from empirical knowledge to self-consciousness.

I would like to argue for two distinctive theses to distance myself from other regressive readings. First, I will argue that all the arguments *within* the Transcendental Deduction are *primarily* explanatory.²⁷ Essentially, the character of Kant's general strategy is *problem-oriented*, rather than *foundation-based*. These arguments are explanatory not merely in the sense that their premises contain

²⁶ In addition, there is no such argument from the synthetic *a priori* truths. Kant does have an explicit argument from the laws of nature that could be taken as the synthetic *a priori* truths in A-Deduction. As I will show in Chapter 5, it is merely an argument for the idealism of physical objects, rather than one for the reality of categories. According to my interpretation, idealism is merely a necessary yet insufficient condition of the reality of categories.

²⁷ These arguments are explanatory, not because Kant officially defines transcendental deduction as an "explanation", which is hardly of any help, since Kant uses explanation in a quite loose sense that includes some kind of analysis. See R2950 (AA 16:585), R2994 (AA 16:606), and R3005 (AA 16:610-611).

a body of knowledge or a range of phenomena that are to be regressively explained, as Ameriks has suggested. I want to argue for something stronger. These arguments are explanatory in the sense that at least in certain crucial steps they follow the *logic of explanation*, which is formally equivalent to the logical fallacy of *affirming the consequent*. In other words, they are not valid. Therefore, these arguments are not abductive, rather than deductive. Here I would like to make two brief precautions. First, I am not arguing that Kant *intends* his arguments to be merely abductive. In both editions of the Deduction, we do find Kant's clear indication of the necessary condition by "only because". However, Kant seems to assert it without arguing for it, for it is difficult to find any *actual* argument of this kind within the scope of the Transcendental Deduction. Second, I am not arguing that the verdict of the abductive nature the arguments is final. As we will see, Kant offers additional arguments for the necessity of the Copernican model in other places.

This reading might come as a surprise. Ameriks believes that a regressive argument supplies necessary condition for knowledge, while a progressive argument supplies sufficient condition for knowledge. However, I think that a regressive argument from knowledge can give sufficient conditions, too. And it is precisely in this sense of the inference to sufficient condition that these arguments are called explanatory.²⁸ On my reading, what differentiates the regressive argument is the explanatory order of the argument, rather than the inferential direction of the argument. The price is that the argument is not valid. However, not every good argument must be valid.

The explanatory reading sheds new light on our understanding of the structure of the arguments. The premises of the arguments usually state certain phenomena, and then the conclusion of these arguments functions as the theory that can explain the phenomena.²⁹ These phenomena range widely. Most, if not all, of the phenomena do not have the so-called Cartesian evidence immune from radical skepticism. What they have in common is instead that they are well-established in ordinary human life and widely recognized by sensible human minds. One important consequence of the abductive reading is to see Kant's conclusion (the Copernican model) as a *theory*. A theory has many features: it is insusceptible to observational access, otherwise it would be data, rather than theory; it has competitors, otherwise, it would be implicational, rather than explanatory; and it has many theoretical virtues, otherwise it could not be evaluated. Generally, the rival philosophical theories are evaluated not in terms of *empirical adequacy*, because in most cases they are equivalent in empirical adequacy. As we will see, Kant extends the realm of the empirical data

²⁸ I do not think that it implies that the anti-skeptical progressive reading is correct.

²⁹ Henrich is insightful in pointing out Kant is concerned more of the solutions to the problems than of the first principle. I believe that my explanatory reading is consistent with Henrich's insight, though I do not think that his proposal of Kant's strategy of theory avoidance is convincing. See Henrich 1992 and 2008.

by including modal truths such that different theories can be evaluated by *explanatory power*. Therefore, I contend that *Critique* should be read as the *groundwork* of his entire philosophy. It is a philosophical grounding not only for his philosophy of the natural and that of the moral but also for his logic and anthropology. The facts concerning cognition and consciousness Kant respectively assumes in logic and anthropology stand in need of further explanation, and it is the *Critique* that offers such fundamental explanation.

Second, I propose that the arguments in the Transcendental Deduction are metaphysical. According to Ameriks, the arguments in the Transcendental Deduction are regressive in the sense of arguing for the preconditions of knowledge. However, the conception of the *preconditions of knowledge* is too loose.³⁰ I am convinced that the arguments in the Transcendental Deduction could be specified in finer terms, namely, in terms of the metaphysical grounding relation. Therefore, I propose a metaphysical interpretation that the arguments in the Transcendental Deduction are arguments for *metaphysical ground*.³¹ All metaphysical facts stand in the metaphysical relation of grounding, in which they are either ground or consequence to another. Grounds and consequences constitute a metaphysical hierarchy in virtue of grounding. Construed in this light, a progressive argument proceeds from ground to consequence, while a regressive argument proceeds from consequence to ground. Therefore, all of the four lines of arguments in the Transcendental Deduction fall under the category of the *argument from consequence*.

There is a metaphysical parallel to the abductive character of explanatory argument.³² The metaphysical relation of ground to consequence is determinate; if a ground is posited, then its consequence is posited, too. By contrast, the metaphysical relation of consequence to ground is indeterminate; if a consequence is posited, then its ground is *not* thereby posited, for it could have other different possible determinate grounds. (B276)³³ If one would like to suggest that the

³⁰ Cassam formulates a novel model of explaining how knowledge is possible, which is characterized by a multi-levels response. According to Cassam, “[a] multi-levels response operates at three levels. Level 1 identifies *means* of acquiring the allegedly problematic knowledge. Level 2 is the *obstacle-removing* level, the level at which obstacles to the acquisition of knowledge by the proposed means are overcome or dissipated. Finally, Level 3 seeks to identify *necessary background conditions* for the acquisition of the relevant knowledge by the proposed means.” (2007, 51) Cassam rejects the anti-skeptical reading, and he believes that the argument from geometry for transcendental idealism is explanatory. While it seems that Cassam’s distinctive interpretation loosely falls under the category of regressive reading, he explicitly dismisses a general regressive interpretation. For instance, Cassam does not think that regressive argument plays any role in accounting for the possibility of empirical knowledge, as he remarks that “[t]he problem is not that Kant doesn’t use regressive transcendental arguments but that he doesn’t use them to answer (HPek).” (2007, 58) Fortunately, Cassam (2008) later clarifies his position by explicitly embracing a regressive argument.

³¹ See Edgar 2010 for an explanatory reading with reference to the structure problem of the B-Deduction. Edgar embraces a *cognitive* reading of the *Critique*, and he thinks that the explanation is a description of the operation, rather than concerns the *causal* mechanism of mind.

³² Here I use abduction in a more general and historical sense of the inference to the sufficient condition, rather than in the modern sense of the inference to the best explanation.

³³ See Kant’s Refutation of Idealism added to the 1787 *Critique*.

arguments in the Transcendental Deduction are deductive, then one's major task is to make the inference determinate.

(f) The Necessity of the Transcendental Path

Intuitively, to attribute a merely abductive reading to the arguments in the Transcendental Deduction is far from satisfactory. In fact, Kant explicitly warns us that it is incorrect to read the arguments in the Transcendental Deduction as merely abductive. Consider Kant's *principle of transcendental deduction*:

The transcendental deduction of all *a priori* concepts therefore has a principle toward which the entire investigation must be directed namely this: that they *must* be recognized as *a priori* conditions of the possibility of experiences (whether of the intuition that is encountered in them, or of the thinking). (A94/B126)

This passage is familiar, yet it seldom calls serious attention.³⁴ I find that Kant's formulation of the principle of transcendental deduction is intriguing. Kant not only offers a guidance but also poses a challenge. Kant does not merely say that if the *a priori* concepts are the conditions of the possibility of experience, then they are related to objects. If that is the case, then what Kant does is merely to offer an abductive argument by showing that the former is the *sufficient condition* of the latter. Rather, what Kant actually says is that *a priori* concepts *must* be the conditions of the possibility of experiences. That is to say, there is no other way to prove the relation of *a priori* concepts to objects than by showing that they are the conditions of the possibility of experience. If the principle is taken seriously, Kant is obliged to offer a *deductive* argument by showing that the former also *the necessary condition* of the latter.

If Kant is to contend that the reality of *a priori* concepts implies that they are the conditions of experience, both positive and negative argumentative strategies are available to him. On the positive strategy, Kant could show that *a priori* concepts as conditions of experience are *conceptually implied* by the reality of *a priori* concepts. In fact, some has been tempted to read the line of reasoning "the synthetic unity---the synthesis---categories" in the second phase of argument as "a chain of implications" without qualification.³⁵ However, dangers are hidden in this strategy. To find the

³⁴ As far as I see, most commentators fail to call attention to this principle, let alone prove that categories are related to objects of experience *only if* categories are the conditions of experience. Probably, it is because they assume that Kant argues deductively at the very start.

³⁵ Van Cleve 1999, 87.

sufficient conditions for some fact is easier than to find the necessary conditions. Many conceptual entailments are not that transparent, and some of them are even illusions, at least they tacitly assume unjustified premises. Normally, we do not have insight into the illusion. We often mistake abductive inferences as deductive ones without being aware of the assumptions of the argument. Then, how can we make sure that the conceptual implication is less controversial?

Another negative and more indirect strategy is *disjunctive syllogism*. Kant could show the necessity of a theory by excluding all other alternatives. Suppose that there are four possible paths T_1 , T_2 , T_3 and T_4 that can allegedly explain the data D , and that they constitute an exclusive disjunction. The argument is deductive if one can argue by elimination that T_4 is right because T_1 , T_2 , and T_3 are wrong. It must be kept in mind that the elimination of any other alternative should not presuppose the correctness of the desired alternatives. It is noteworthy that when Kant eliminate the other theories,³⁶ he can also evaluate them in terms of the explanatory adequacy. On this strategy, the sufficiency and the necessity of the transcendental path are argued for in two quite different ways.

In order to vindicate the necessity of the transcendental path, Kant owes us an account that virtually *all other possible systems* are doomed to fail. It is no easy task. To be sure, Kant does say something relevant *within* Transcendental Deduction. However, what Kant says is quite weak. Kant passes over it so fast that many readers fail to be conscious of it as if this problem is neither important nor difficult.³⁷ Kant makes the inference that transcendental deduction must be correct precisely *because* the empirical deduction is incorrect. (A87/B119) Unfortunately, this argument is desperately incomplete. Kant's rejection of empirical deduction assumes that the empirical path is the *only* rival to the transcendental path. The argument is convincing only if an additional premise is justified that there are only two paths of deduction: one is the empirical path, and the other is the transcendental path.³⁸

One could object that it is likely that the empirical and the transcendental path are not jointly exhaustive. The limitation of the historical context might make Kant fail to have a survey of the alternatives other than the Leibnizian-Wolffian rationalism and the Lockean-Humean empiricism. One might wonder, for instance, why the Cartesian rationalism seems not a serious and genuine

³⁶ It is even true of the empiricism.

³⁷ Kant explicitly claims that "the sole manner of a possible deduction of pure a priori cognition is conceded, namely that which takes the transcendental path" (A87/B119).

³⁸ This might be justified by appeal to the grounding dilemma: either object makes representation possible or representation makes object possible. Kant can be regarded as providing an argument by disjunctive syllogism.

option for Kant. This question becomes even more pressing when we take into consideration the fact that our contemporary non-empiricists are not Kantians, but Cartesians.³⁹

As we will see, there is some element of truth when Kant takes the empirical path as the only rival theory to his critical philosophy in 1781. However, it is not the *starting point* of Kant's long journey in pursuit of the answer to his puzzle. Before the 1772 Herz letter Kant had begun his engagement with other philosophical systems. Neither is it the *destination* of Kant's long journey. In 1780s Kant felt the threat of the middle way and he incorporated the logical fanatical path into the 1787 *Critique*; in 1790s the Plato renaissance in Germany led Kant to reconsider the fanatical mystical path. In order to illuminate Kant's sustained effort, we must make reference to his publications other than the *Critique* and to his fragmentary notes so as to establish the list of philosophical systems he has taken into account.

Even if we admit that Kant takes all important philosophers in history under scrutiny, we still could raise the doubt whether Kant makes dialogue only with those systems of philosophy that can historically contingently come into his view. It is conceivable that there could be other philosophical systems in the future or even in an alternative history, which are entirely not accessible to Kant. It is likely that Kant's own system is also overcome by the new systems in the future. Therefore, Kant must justify a stronger thesis that all other *possible* systems of philosophy are doomed.

In reply, Kant is convinced that his puzzle is "the key to the whole secret of metaphysics" (AA 10:130), and all important metaphysical systems are virtually making response to the puzzle by presupposing some kind of the grounding relation of representation of object. Kant classifies the previous great philosophical systems into several categories, which are mutually exclusive and jointly exhaustive, and then he reconstructs the spectrum in terms of the model of ground. The great philosophical systems appear to be historical and contingent, but each of them occupies a unique position in the spectrum. By reconstructing the new philosophical spectrum, Kant elevates his examination of the philosophical paths from the historical level to the systematic level. Consequently, Kant is in a position to raise knocking-down objections to virtually *every possible* philosophical path by attacking their grounding models of the relation of representation to object.

Another critically important distinction between Kant's arguments for the sufficiency of the transcendental path and his arguments for its necessity is concerned with the nature of the *premise* of the arguments. In his argument for the sufficiency, Kant starts with *non-semantic facts* and proceeds

³⁹ See Bonjour 1998 and Bealer 2002.

to the explanation of these facts. These non-semantic facts include the necessary connection of objects, the identity of self-consciousness, the necessary connection of concepts in judgment, and the singularity of space. In his argument for the necessity, by contrast, Kant starts with the *semantic facts* and then proceeds to the only explanation of these facts by eliminating all other rival theories. These semantic facts include the *a priori* reference of categories and the synthetic *a priori* truths. The non-semantic facts initially appear less relevant to the reality of the categories, and that is where the explanatory powers of Kant's Copernican model of grounding lie.

The vindication of the necessity of Kant's transcendental path and the hidden deductive character is of vital importance. As far as I can see, the most fatal objection to the project of the transcendental deduction is that Kant commits the modal fallacy by conflating the *de dicto* necessity and the *de re* necessity. This ramifications of the objection destroy the entire Copernican Revolution: not only categories but also space and time are thrown into question. As soon as we prove that the transcendental path is necessary, we will find that Kant does not make an invalid argument at all. The *de re* claim that empirical objects have necessary properties is not the negligence but the *intention* of Kant's view of "no necessary connection without necessary instantiation".

Furthermore, it enables us to evaluate the Analytic. We should not overestimate the independent significance of the Analogies. The friends of transcendental arguments have widely believed that transcendental argument represents the best of Kant's intentions, and they should be separated from the context of "transcendental psychology". Likewise, Guyer has powerfully argued for the failure of the project in the Transcendental Deduction and the success of the arguments in Kant's Principles.⁴⁰ However, arguments in the Analogies cannot stand on their own, because they cannot possibly preclude the possibility that our constitutions happen to be representing the objects in a systematically accurate way. It is nothing but the ghost of the model of common ground Kant attempts to dispel in Transcendental Deduction *before* the Analogies.⁴¹

(g) Aufbau

My dissertation will be divided into two parts. Part I runs from Chapter 1 to Chapter 5, and Part II runs from Chapter 6 to Chapter 9. In Part I, I will argue for the prior assumption *that a priori*

⁴⁰ Henrich famously argues that deduction in transcendental deduction is not used in a logical sense, but in a legal sense. It does not refer to the traditionally conceived species of inference from general to particular; rather, it refers to a variety of practical reasoning. In spite of its plausibility, Henrich's non-deductive and practical reading of deduction does not imply that no logical rigor should be expected or found in transcendental deduction. See Henrich 1989a.

⁴¹ In effect, this line of thought resonates with Stroud's famous objection to transcendental argument. See Stroud 1968.

concepts must be the conditions of the objects of experience if they are to be related to objects, which Kant calls “the principle of transcendental deduction”. Particularly, I will justify the *necessity* of the transcendental path against the background where explaining synthetic *a priori* proposition is considered as a measure of the success of the grounding model of the reference of representation to object. I will reconstruct the philosophical spectrum with reference to the model of the representation and the object, and I would like to suggest that Kant has a much more macroscopic view on this issue. Kant delineates three most important alternatives by their grounding model, and he explicitly dubs different labels on them: (i) for the empirical path, the object makes the representation possible; (ii) for the mystical fanatical path, the representation makes the object possible; and (iii) for the logical fanatical path, a third thing makes both the representation and the object possible. From Chapter 2 to Chapter 4, these three paths will be examined chapter by chapter. All of these three paths seem to exhaust all the possible alternatives. However, Kant thinks that none of them is desirable; all of them suffer from various objections and run counter to Kant’s most committed assumptions: explanatory rationalism, causal realism, and epistemic atheism. In Chapter 5, it turns out that Kant discovers a new transcendental path in which the representation makes the object possible not in the sense of *a priori* production but in the sense of *a priori* determination.

After showing that only the grounding model of the transcendental path is viable in Part I, in Part II, I will turn to Kant’s arguments for the reality of the categories by explaining a variety of phenomena that are related to yet not identified with synthetic *a priori* propositions. I believe that there are four basic lines of argument drawing on different theoretical resources: the argument from cognition, the argument from self-consciousness, the arguments from judgment, and the official argument. From Chapter 6 to Chapter 9, these four lines of arguments will be addressed one by one. The previously established Copernican grounding model can serve as a test for these arguments; any picture drawn by each independent argument should be compatible with and even entail the Copernican model. Metaphysically, I suggest that all these arguments lead to a modally distinctive metaphysical picture of the world: no necessary connection without necessary instantiation. Methodologically, I propose that none of these arguments is anti-skeptical; rather, all of them carry heavy philosophical presuppositions (the actuality of science, objective representation with semantic value, personal identity, the truth-claim of synthetic propositions, the laws of nature, etc.). In my view, Kant’s fundamental strategy is explanatory in character: to explore the theoretical potential of these philosophical premises and to make them compatible with each other so as to produce maximum explanatory benefits. Along the course of exploration, Kant’s most fundamental assumptions on theoretical norms will also be revealed.

(h) Notes on the Texts

Sources: All references to Kant are to the *Akademie Ausgabe*: Immanuel Kant, *Kant's gesammelte Schriften*, ed. Preussische Akademie der Wissenschaften and Deutsche Akademie der Wissenschaften zu Berlin (Berlin: De Gruyter, 1900–). The *Critique of Pure Reason* is cited according to the standard A/B edition and page number (e.g. Axxx/Bxxx). And other works than the *Critique of Pure Reason* are cited according to volume and page number (e.g. AA x:xx).

Translation: Unless otherwise noted, the translations of Kant's text are mainly from The Cambridge Edition of the Works of Immanuel Kant. A few of them are modified when I find necessary.

Abbreviation: I will refer to Kant's individual works by abbreviations of their English titles with key words in their titles (e.g. *Critique* for *Critique of Pure Reason*). In particular, I will often refer to the two editions of *Critique of Pure Reason* as 1781 *Critique* and 1787 *Critique* in order to call attention to the chronological order of their publication and the development of his views. The abbreviations for the titles of other Kant's works will be noted in the body part of this work.

Emphasis: For the quotation from Kant, I will follow the editors of the Cambridge Edition in rendering Kant's original Latin in italics and the original *Fettdruck* in bold. Within quoted Kantian texts, my emphasis is still indicated and explicitly noted by italics.

Chapter 1 The Problems of the Transcendental Deduction

1.1 Introduction

While the label of transcendental deduction becomes popular only after the publication of *Critique of Pure Reason* in 1781, the explicit formulation of the general question can at least be traced to Kant's famous letter to his former student Marcus Herz on February 21st. 1772. Even before 1772, it was not without trace in its historical origin.⁴²

In fact, Kant has different formulations of the problem of transcendental deduction, and he is convinced that it is theoretically profitable to resolve the puzzle of transcendental deduction. According to Kant's official claim, the Transcendental Deduction addresses the question as to how concepts can be related to objects *a priori*. According to the Introduction to the entire *Critique*, the Transcendental Deduction is supposed to answer the question as to how the *a priori* synthetic propositions in physical science are possible. Despite the different formulations, there is little difficulty to recognize them as the same problem. In addition to the central problem, the Transcendental Deduction brings us many other explanatory bonuses that are not formulated explicitly. The A-Deduction offers an explanation of how experience, or empirical cognition, is generated, by means of which it complements an account of the metaphysical origin of objects. The B-Deduction gives an answer to the question as to on what the empirical synthetic judgment is grounded.

Before we inquire into transcendental deduction, I would like to make brief comments on question as to whether an *independent* study of transcendental deduction is possible. By and large, this question usually is whether the beginning of a study of transcendental deduction could be independent of Kant's *idealism*. Initially, it seems plausible to suggest that the project of transcendental deduction depends on his theory of idealism, since it seems that Kant's idealistic theory of space and time both restricts and inspires Kant.

On the one hand, Kant's theory of idealism appears temporally earlier than transcendental deduction. It seems that Kant's solution to the puzzle could be inspired by his views on the transcendental idealism of space and time.⁴³ Kant's articulation of idealism appears in his *On the Form and Principles of the Sensible and the Intellectual World* (1770)⁴⁴, where the four space-arguments and time arguments have taken their standard shape. However, the general problem of the grounding relation of the representation to the object was formulated in the famous Herz letter in

⁴² For a valuable study on the history of transcendental deduction see Carl 1989.

⁴³ See Rosefeldt 2013.

⁴⁴ Abbreviated as *Inaugural Dissertation* thereafter.

1772 and the publication of his solution to the problem came as late as the publication of the 1781 *Critique*.

On the other hand, Kant's view on categories in the Transcendental Deduction could be *restricted* by his views on transcendental ideality of space and time in the Aesthetic. The above historical facts accord well with the architectonic of *Critique*, where the Aesthetic also precedes the Transcendental Deduction. In the *Critique*, Kant establishes the idealism of space and time and therefore he establishes the mind-dependence of physical objects. It seems that when we begin to settle the issue of transcendental deduction, we have already been thrown into an idealistic world. The conclusion of the Transcendental Deduction must be consistent with the consequences of idealism.

While I agree that the Transcendental Deduction depends on idealism in one sense or another, it would be too hasty to conclude that Transcendental Deduction must *presuppose* the result of Aesthetic that space and time are the forms of sensible intuition. The idealism of physical objects turns out to be a necessary condition for the objective reality of categories. It does not imply that in the very *beginning* of transcendental deduction we have committed to the theory of idealism. Moreover, Kant's theory of space and time is far from the only way he arrives at idealism. Kant has other means to derive his doctrine of idealism without making an appeal to his theory of sensibility.⁴⁵

In section 1.2, I will examine Kant's formulation of the problem of representation of object in the famous Herz letter. I will propose that Kant's puzzle concerns the ground of the reference of intellectual concepts, and it should be understood as meta-semantic or, more specifically, metaphysical in character. In this light, the difficulty of transcendental deduction is that it seems that no grounding model could match the case of the reference of categories. In section 1.3, I will examine Kant's formulation of the question of how the synthetic *a priori* propositions are possible. I propose that Kant's previous objective reality formulation and this synthetic apriority formulation essentially address the same question, in spite of some differences. I suggest that it is profitable to understand respectively the synthetic *a priori* propositions as *explanandum*, and the objectivity reality of categories as *explanans*. In section 1.4, I will survey the philosophical systems that are taken into account by Kant: the system of occult quality, the empirical path, the mystical fanatical path, and the logical fanatical path, and then reconstruct a spectrum for these systems with reference to the grounding relation of representation to object. In section 1.5, I will consider Kant's most fundamental assumptions: the explanatory rationalism, the causal realism, and the epistemic

⁴⁵ See Chapter 5.

atheism, which play crucial roles in Kant's systematic rejection of the previous philosophical systems.

1.2 The Secret of Metaphysics

1.2.1 A Meta-semantic Reading of Kant's Puzzle

In his famous letter to Herz on February 21, 1772, Kant writes that "I noticed that I still lacked something essential, something that in my long metaphysical studies I, as well as others, and failed to consider and which in fact constitutes the key to the whole secret of metaphysics, hitherto still hidden from itself. I asked myself this question: On what ground is the relation (*Beziehung*) of that in us which we call 'representation' to the object based?" (AA 10:130)

In the most general sense, a representation could be mental, linguistic, or pictorial, etc. Since Kant keeps mental representations in mind, in the following I will take representations as mental one without qualification. Kant's mental conception of representation could be understood in two different senses. In most cases, representation could be understood in a broad sense in which it signifies the *mental state whatsoever*. In this sense, the generic term of representation is primitive, and it cannot be defined non-circularly.⁴⁶ As Kant indicates, not all mental states are representational, i.e., have a relation to object. Occasionally, Kant seems to suggest that representation could be understood in a narrower sense, in which representation refers to *representational mental states*.⁴⁷ The narrow sense of representation is synonymous with Kant's technical notion of *cognition*, which is defined as the conscious representation of object.⁴⁸ Representation in the narrow sense is a species of representation in the broad sense. In this narrow sense, representation implies intentionality, and therefore all representations are representational. Since in the Herz letter Kant seems to *assume* that representation must have relation to object, here I take representation to be used in the narrow sense.⁴⁹

The term "relation" in locution "the relation of representation to object" is both ambiguous and obscure. Firstly, the term 'relation' does not specify *the nature of the relation* in which representation and object stand. Secondly, the term 'relation' does not specify the *asymmetry* of the relation in which representation and object stand. In my view, the relation of representation to

⁴⁶ In his numerous transcripts of lectures on logic, this view appears repeatedly. See the *Vienna Logic* (AA 24:805).

⁴⁷ For instance, Kant hints that all representations "represent something in me only insofar as they belong with all the others to one consciousness". (A116)

⁴⁸ See Chapter 6 for a more systematic survey of the definition of cognition.

⁴⁹ As we will see in Chapter 5, Kant's commitment to the representationality or intentionality of representation is much deeper than we might think.

object is a *semantic* relation of *reference*. Obviously, the relation of representation to object a binary relation, one between representation x and object y . Firstly, the relation of representation is *asymmetrical*; if one can say x represents y , it does not follow that y represents x . The semantic relation of reference is *partly transitive*; if x represents y , and y represents z , then it does not preclude the possibility that x represents z .⁵⁰ In the following, I will use ‘reference’ or ‘reference relation’ in place of the generic term of ‘relation’ to indicate the *semantic* and *asymmetrical* character of representing relation.

Although I propose a *semantic reading*, contra to a *causal reading*, of the relation of representation to object in the Herz letter, in any event it does not follow that *Kant’s question* is a semantic one intended to show *that* representations refer to objects. As Kant writes clearly, the question he has in mind is *not* about “the relation of that in us which we call ‘representation’ to the object”, which is a semantic question. Rather, his question is about the *ground* of “the relation of that in us which we call ‘representation’ to the object”, which is not merely a semantic question.

In order to illustrate the point, one analogy to the theory of reference in the philosophy of language could be made in service. The reference in language is a relation between linguistic expression and object. One central task of semantics is to assign semantic values to linguistic expression. Reference is widely regarded as the primary semantic value of the linguistic expression. By assigning reference to linguistic expression one can have a minimal semantics, i.e. referential semantics, for a purely extensional language. But referential semantics merely provides us with the answer to the question *what the referent of a linguistic expression is*. Referential semantics by itself does not answer further questions such as *what it is for a reference relation to obtain* and *what the ground of the reference of a linguistic expression to its object is*. This further kind of questions is meta-question. Since the target-question is a semantic question, it is a meta-semantic question. It is the task of meta-semantics to answer the question by developing a *theory of reference*.

Both linguistic expression and mental representation are intentional in character. The above analysis of referential expression could be extended and applied to mental representation. In the same vein, what Kant finds puzzling is not the referential relation of representation to object, but *the ground* of the reference of representation to object. In other words, what Kant finds problematic is not the *first-order question* of reference, but a *meta-question* of the ground of reference. Construed in this light, Kant’s question is not semantic, but meta-semantic.

⁵⁰ Kant’s discussion of the second-order representation is not common. It seems that sometimes Kant holds that judgment is a second-order representation. In his discussion of the logical use of understanding, Kant writes that “[j]udgment is therefore the mediate cognition of an object, hence *the representation of a representation* of it” (A68/B93).

The question of the ground of reference relation is not only meta-semantic, but it is also *metaphysical*. The meta-semantic question could be metaphysical, but it also could be epistemological. How could we determine the precise character of the meta-semantic question? Note that Kant is inquiring into the *ground* of the reference relation, it is natural to suppose that he is concerned primarily with a metaphysical question. The question is metaphysical not only in a loose historical as well as a distinctive Kantian sense but also in the contemporary sense. First, the notion of ground is an important metaphysical notion in German philosophy in the eighteenth century. Wolff, Baumgarten, Crusius and many others make a continuous contribution to the philosophical literature concerning the notion of ground.⁵¹ Its centrality in Kant is reflected by the fact that the question of the ground of reference is referred to “the key to the whole secret of metaphysics”. Second, this question is metaphysical in a contemporary proper sense. One typical meta-question with regard to a specific domain is to ask whether there exist facts and property distinctive of that domain. In meta-ethics, we can ask whether the moral discourse commits us to the existence of moral facts and moral properties. In meta-semantics, we can ask whether the semantic discourse commits us to the existence of semantic facts and semantic properties. Both of them are widely recognized as characteristically metaphysical questions.⁵²

Kant’s question is not metaphysical in the sense of coping with *the ontology of semantic facts and semantic properties such as reference*. Rather, it is metaphysical in the sense of giving *the ground of semantic facts and semantic properties*. In effect, Kant is asking how the reference of representation to object is possible. One might object that the meta-semantic reading of Kant’s puzzle comes down to nothing but a causal reading of the “relation of representation to object” which I have rejected earlier. To be sure, Kant is not always careful to distinguish the different senses of relation, and sometimes he directly hits upon the question of metaphysical ground without mentioning the semantic surprastructure.⁵³ Nevertheless, I believe that it is profitable to disambiguate the distinct levels of the question. As we will see in Chapter 5, it is precisely this effort that enables us to resolve the apparent inconsistency or circularity in Kant’s Transcendental Deduction.

In pursuing the question of the ground of the reference, Kant is tacitly assuming that the reference of representation to object must have a ground: for any representation x and object y , if x refers to y , there must be a ground g for the reference to hold. The assumption of the ground

⁵¹ For detailed discussions see Watkins 2005 and Stang 2016.

⁵² For Kant grounding is a metaphysical binary relation between *two things*, and derivatively between *two facts*. It is both asymmetrical and transitive. Precisely because ground is also relational, the confusion between two levels arise.

⁵³ Take Kant’s paradigmatic formulation of the question in §14 for example. After introducing the necessary relation of representation to its object, Kant immediately touches upon the metaphysical relation of making-possible, i.e., that of grounding. (A92/B124-125)

must be understood against Kant's larger picture of the general assumption of explanatory rationalism, and thus metaphysical rationalism. Explanatory rationalism is the view that everything can be explained. Although Kant never makes it explicit in his publication, there is no doubt that explanatory rationalism is precisely his *working assumption*. Applied to the specific realm of reference, explanatory rationalism implies that every reference relation has a ground. If representability of all empirical representation has their own ground, then *a priori* ones should have, too.

Kant also frequently employs the term "objective reality" or "objective validity" to signify "the relation of representation to object".⁵⁴ The question is whether the notion of objective reality is semantic or metaphysical. Since the objective reality of a representation could be proved by both its being lawful and its being a fact, i.e., by both *quid juris* and *quid facti*, it seems that Kant imposes metaphysical constraints upon the semantic relation of reference. In addition, in some argument Kant presupposes a strong notion of objectivity which demands not only the relationship of correspondence but also that of the real ground. Therefore, I propose that by the objective reality what Kant has in mind is the meta-semantic notion of *really grounded reference*.

1.2.2 Kinds of Representation and their Grounding Models

Before we answer the question what the ground is for reference relation to hold, we should be clear of the domain-specific nature of ground. Different kinds of representation have different kinds of reference relation, and different kinds of reference relation have different kinds of ground. Then, what kinds of representations are there for Kant?

Let's reconstruct the kinds of representation according to the twofold distinction as follows. In terms of *the source of representation*, all representations are divided into sensible and intellectual ones. In terms of *the immediacy of representations*, all representations are divided between intuitive and conceptual ones. According to the combination of the twofold distinction, there are four kinds of representations that can be taken under discussion: empirical intuition, intellectual intuition, empirical concepts, and intellectual concepts. In spite of the difference, the relation of each and every kind of representation must have a ground.

⁵⁴ I think that in most cases objective reality and objective validity are equivalent. Kant also uses objective validity in other different senses. Occasionally, Kant equates objective validity as truth; (A125) in *Prolegomena*, Kant defines the objective validity of a judgment as necessary universal validity (for everyone), which is usually understood as truth-capable. (AA 4:298) Therefore, I will only use the term 'objective reality' to signify the relation of representation to object and leaves term 'objective validity' for the notion of truth-aptness, which has been convincingly defended by Prauss (1971) and Thöle (1991).

Unfortunately, in the Herz letter Kant does not discuss the four kinds of representation in the way I have suggested earlier. In fact, Kant draws distinctions within intuition and within intellect respectively. Insofar as intuitions are concerned, the relation of representation to the object in terms of passive-active distinction, namely, two opposite directions of causation. Insofar as intellectual representations are concerned, the relation of representation to the object in terms of intuitive-discursive distinction, namely, the two distinct kinds of intellect. Since intuition and intellect is *not mutually exclusive*, this twofold distinction is doomed to be *extensionally intersected and unexhausted*. Therefore, the twofold distinction produces only three kinds of representations. It is in the case of intellectual intuition where the twofold distinction has an overlap, whereas it is in the case of intellectual concept where the twofold distinction has a gap. Nonetheless, the overlap and the gap in Kant's own twofold distinction does not bother us. My focus is on what the ground of every kind of representation is, rather than on whether the division of representations is logically acceptable. It suffices if the result of the division is jointly exhaustive. Fortunately, Kant adds the discussion of intellectual concept to the list, and thus there are four kinds of representation which are extensionally exhaustive.

Although every relation of representation to object has a ground, they have entirely different modes of ground. On Kant's view, the reference of sensible intuition rests on the fact of *human affection* where object makes representation possible; the reference of intellectual intuition rests on the fact of *divine creation* that representation makes object possible; and the reference of empirical concept rests on the fact of *logical reflection* that object makes representation possible.

Underlying both cases of *human affection* and *divine creation* it is *the model of cause and effect* that is at work. On this model, the effect is brought into *existence* by its cause.⁵⁵ However, empirical concepts are acquired from sensible intuition not in the way sensible intuitions arise from the object through causation. While the derivation of empirical concepts can be loosely subsumed under *the generic model of ground to consequence*, the species of the model of cause and effect loses its weight here. As Kant makes clear, it is the *matter* rather than the *existence* of empirical concept that is derived from sensible intuition. Therefore, it does not fall under the category of the model of causation. In addition to its matter, the form of the empirical concept is originated from the logical use of understanding.⁵⁶

On Kant's view, the reference of sensible intuition rests on *human affection* where the object makes the representation possible; the reference of intellectual intuition rests on *divine creation* where

⁵⁵ The underlying assumption is that this analysis is unobjectionable only insofar as *existence* is concerned.

⁵⁶ For a detailed account for the logical origin of concept see Kant's *Logic* (AA 9:94-95).

the representation makes the object possible; and the reference of empirical concept rests on *logical reflection* where the object makes the representation possible.

The *ground* of the reference of representation to object rests upon a *grounding relation* of ground to consequence. Kant is committed to the following assumption: if there is a real ground for the reference relation of x to y to hold, then the ground is either the fact that x is the ground of y , or the fact that y is the ground of x . The *semantic relation* of reference derives its referential power from the *metaphysical grounding relation* between representation and object. Therefore, Kant is committed to a broadly causal theory of reference: for any representation x and object y , x refers to y only if x is the ground of y , or y is the ground of x . In the case of the reference of representation to object, there is no *external ground* can be pursued; it cannot be that it is z that grounds both x and y . The candidate ground can only be internal. Since grounding relation is also binary, either x grounds y or y grounds x .

All of these three kinds of representation can be made intelligible, for all of them are taking either horn of the grounding dilemma, though *the specific model* might differ. However, things are different in the case of *intellectual concepts*. We simply cannot find out which horn intellectual concepts can be caught on, for “they are neither caused by the object nor do they *bring the object itself into being*” (AA 10:130). Intellectual concepts simply cannot accommodate with any alternative in the previously discussed framework. Intellectual concepts are neither intellectual intuition, for they are discursive and general representations, which cannot bring the object into existence; nor are they empirical concepts, for they have their origin in the nature of soul, rather than in the object. To put it in another way, they are something between intellectual intuitions and empirical concepts. It is precisely because they do not fall in either category to fit any mode of explanation that makes them a puzzle. In fact, any one of the other three models of grounding representation to object cannot even shed light on the case of intellectual concepts, either.

There could be two responses to this predicament of intellectual concepts. One response could be that intellectual concepts cannot take either horn of the dilemma because the dilemma is false. The other response could be that intellectual concepts can take either horn of the dilemma because the dilemma should be properly understood. In the *Critique*, Kant makes move along the line of the second response. Kant does think that there is a dilemma, and the case of *a priori* concepts of understanding must take one horn of the dilemma. I will develop it in Chapter 5.

1.3 The Mystery of Metaphysics

1.3.1 A New Riddle?

In his 1772 letter to Herz, Kant claims that “*the whole secret of metaphysics*” lies in the general question of the ground of the reference of our representations to object. In light of this novel articulation of metaphysical problem, Kant’s puzzle is how *pure concepts of understanding* can be related to object. In addition, Kant maintains that in his long metaphysical studies this secret fails to be considered by him as well as other philosophers so far. Presumably, Kant is not saying that this question has never been tackled in any guise in the history of philosophy. Rather, Kant is saying that no one in history has explicitly formulated this problem in the general form, and attached the unparalleled importance to it. If the problem of the ground of reference is taken literally as “the whole secret of metaphysics”, it is natural to suppose that the grounding problem should stand as *the leading question* in Kant’s future *magnum opus* in metaphysics, whatever title his masterpiece bears.

The metaphysical scene in Kant’s mature work *Critique* appears to be a little bit unexpected, however. To be sure, in the Book of Doctrine Kant’s general strategy is *first* to isolate and identify the *a priori* elements in the faculties of sensibility, understanding, and reason, and *then* to show whether (and how) these *a priori* representations are related to objects. Transcendental Aesthetic, Transcendental Analytic, and Transcendental Dialectic share the following general argumentative structure in common:

- (1) For certain representations Rs, Rs are *a priori*.
- (2) If Rs are *a priori* representations, then they are objectively valid.
- (3) Rs are objectively valid. (By modus ponens)

Everything goes well. However, the centrality of the grounding problem seems to be *compromised* by the Introduction in the 1781 *Critique*. After introducing the distinction between analytic and synthetic judgments, Kant writes “that in synthetic judgments I must have in addition to the concept of the subject *something else* (X) on which the understanding depends in cognizing a predicate that does not lie in that concept as nevertheless belonging to it” (A7-8). In the case of empirical judgments or judgments of experience, there is no difficulty here, and *the third thing* X is “the *complete experience* of the object I think through concept” (B11).

In the case of synthetic *a priori* judgments, however, the third thing X is “*mystery*” (A10/B23), as Kant claims. Kant stresses the importance and novelty of the formulation of the question as

such. On Kant's view, from ancient times philosophers *failed* to raise this question. If the question of philosophy is misidentified, there is no wonder why all great philosophical systems hitherto constitute nothing more than merely vain attempts. In confrontation with the mystery of synthetic *a priori* judgments, Kant identifies the task of elucidation of the mystery as "uncover the *ground* of the possibility of synthetic *a priori* judgments" (A10).

In the 1787 *Critique*, the conflict between the question of the objective reality of representation and that of the synthetic apriority of judgments is not alleviated but aggravated. In the 1781 *Critique*, the distraction of synthetic *a priori* judgments is at most disturbing. In the 1787 *Critique*, however, Kant's official preoccupation on the question of synthetic *a priori* judgments is made even more evident, and it is particularly so in the new additions Kant makes to the 1787 *Critique*.

The Introduction to the 1787 *Critique* is more detailed in length and more carefully designed in structure. In this revised and enlarged Introduction, the added Section V and Section VI are meant to sharpen the focus on synthetic *a priori* judgments. Section V is titled as "*Synthetic a priori judgments are contained as principles in all theoretical sciences of reason*" (B14), which intends to establish that synthetic *a priori* judgments do *exist*, after explicating what synthetic *a priori* judgments *mean* in Section IV. Section VI is titled "*The general problem of pure reason*" (B19) is used to refer to the "how are synthetic judgments *a priori* possible". Here is how Kant introduces the general problem of pure reason: "[t]he *real problem of pure reason* is now contained in the question: **How are synthetic judgments *a priori* possible?**"(ibid.) Then Kant explicitly links the fate of metaphysics with the failure of the identification of "the real problem". While Kant's conviction is retained that there must be some fundamental mistake in previous systems of metaphysics, now it seems that Kant's vision on the nature of the problem is radically transformed. As Kant writes:

That metaphysics has until now remained in such a vacillating state of uncertainty and contradictions is to be ascribed solely to the cause that no one has previously thought of **this problem** and perhaps even of the distinction between **analytic** and **synthetic** judgments. (B19)

In the 1781 *Critique* Kant proceeds in the Doctrine of Elements as if the central question of synthetic apriority does not exist. In contrast, in the 1787 *Critique* the question of synthetic apriority not only is formulated in the Introduction, but also plays a conspicuous role in the body part of *Critique*. In fact, Kant's brief analysis of the *logical order* between that-question and how-possible question In the Introduction has betrayed that the argumentative potential of the question is to be exploited. It creates the expectations of the repercussions in the structure of the argument, and it

is made felt especially in Transcendental Aesthetic. Kant makes substantial changes in both the content and the structure of the Aesthetic. Based on the *Prolegomena*, Kant not only rewrites the arguments from mathematics, where the actuality of synthetic *a priori* propositions is indispensably involved as the premises, but also separates them from Metaphysical Exposition and allocates it under Transcendental Exposition to indicate its independence from the old space and time arguments originated in his *Inaugural Dissertation*. At the end of the Aesthetic in the 1787 *Critique*, Kant adds a brief section titled “*Conclusion of the Transcendental Aesthetic*”. In Conclusion, Kant gives a definitive and explicit answer to the question of synthetic *a priori* propositions in order to show that this question is always taken seriously and kept in mind:

Here we now have one of the required pieces for the solution of the general problem of transcendental philosophy - **how are synthetic *a priori* propositions possible?** - namely pure *a priori* intuitions, space and time, in which, if we want to go beyond the given concept in an *a priori* judgment, we encounter that which is to be discovered *a priori* and synthetically connected with it, not in the concept but in the intuition that corresponds to it; but on this ground such a judgment never extends beyond the objects of the senses and can hold only for objects of possible experience. (B73)

This new formulation of the mystery of metaphysics in terms of the ground of the synthetic *a priori* truths brings about a twofold worry. On the superficial level, it seems that *the official claim* of elucidating the mystery in the Introduction stands in tension with *the actual general argumentative structure* in the Aesthetic, the Analytic, and the Dialectic. It creates the impression that Kant raises *one question* in the Introduction and then answers *another distinct question* in the following body part. On the bottom level, it seems that in the *Critique* we have a superficially distinct question from Kant’s puzzle in the Herz letter. One might wonder whether Kant changes his mind in identifying the problem of metaphysics, or whether the centrality of the question of the ground of reference is compromised or even replaced by another question.

1.3.2 The Objective Reality and the Synthetic Apriority

In order to discharge the twofold worry, I would like to clarify the relationship between the between objective reality formulation and synthetic apriority formulation of Kant’s puzzle. One charitable proposal is that the two superficially distinct questions are *virtually identical*. Many striking parallels could be found in the way Kant formulates and answers the question. The label “mystery” hidden in synthetic *a priori* judgments is analogous to the “secret of metaphysics” in the Herz letter. The manner in which Kant his puzzle in the *Critique* is reminiscent of that in the Herz letter Both

the Herz letter and the *Critique* introduces the semantic dimension that is essentially *representational*. The former introduces the *reference* of concepts, while the latter introduces the *truth* of judgment. Both the Herz letter and the *Critique* concerns not the semantic question, but the meta-semantic question of the ground of the semantic fact. Kant explicitly identifies the endeavor to decipher the mystery of reason as to “uncover the *ground* of the possibility of synthetic *a priori* judgments” (A10). In some other place, Kant suggests that the question of *the ground of something* is equivalent to the question of *how something is possible* by using them interchangeably. Again, we come across a striking parallel of transcendental deduction to the philosophy of language. Kant is committed to a general causal theory of semantics: not only reference but also truth must have some causal ground such that they could perform their representational function. Both in the Herz letter and in the *Critique* Kant articulates a general question and then identifies *one species* of the general question as a philosophical puzzle. In both cases the ground of empirical concept and the ground of the empirical judgment are unproblematic. In the Herz letter, Kant believes that there is difficulty in understanding the ground of the reference of *a priori* concepts. In the *Critique*, Kant does not think that we run into troubles in explaining the *ground* of the synthetic *a priori* truths.⁵⁷ Besides these interesting parallels, even Kant himself occasionally slides from the question of synthetic apriority to that of objective reality. (A155-157/B194-196)

Despite the striking parallel of the question of objective reality with that of synthetic apriority, we should be cautious to make such a straightforward identification since that the *generality* of the scope of the two questions is different. The difference in the scope of the two questions arises from the multiple roles played by the pure concepts of understanding. The pure concepts of understanding can have different uses in synthetic judgment. First, synthetic judgment involves the explicit use of pure concepts of understanding. Take the concept of the relation of cause and effect for instance:

(1) Everything that happens has a cause.

The concept of cause functions as predicate and thereby makes explicit appearance in the synthetic proposition. However, the use of pure concepts of understanding in judgments is not

⁵⁷ We can even formulate an analogous dilemma for synthetic truths: for synthetic truths either experience makes synthetic truth possible or synthetic truth judgment makes experience possible. The former case is synthetic empirical judgment, while the latter case is synthetic *a priori* judgment. This fictional dilemma for synthetic judgments seems to fall under the category of “synthetic representation” (A92/B124), whose use is introduced by Kant’s into his first formulation of the grounding dilemma in §14 of the *Critique*.

exhausted by its explicit use in synthetic *a priori* judgments. They also play a role in their implicit use in synthetic *empirical* judgments such as:

(2) All bodies are heavy.

(3) The sun warms the stone.

In the first example, the concept of bodies and that of heavy instantiate the inherence relation between substance and accident, while in the second example the concept of sun-warming and that of stone-warmed invoke the causation relation between cause and effect.

In many texts after the 1781 *Critique* Kant assigns the various roles to the categories. In 1783 *Prolegomena*, Kant confers the truth-conducive role to the implicit use of pure concepts so as to elevate the subjectively valid judgments of perception to the objectively valid judgments of experience. In 1787 *Critique*, Kant assigns the role of determiner to the implicit use of pure concepts so as to fix the undetermined relation between concept and judgment. If pure concepts of understanding play a role in synthetic empirical judgments as well as in synthetic *a priori* judgments, the previously suggested parallel between the two questions is not entirely true, but virtually true.

1.3.3 Data and Theory

The above analysis shows not the identity but the parallelism between the two questions. In fact, Kant explicitly claims that that the answer to the possibility of the synthetic *a priori* truth is nothing other than the ground of *a priori* reference, namely, the grounding model of the representation of the object. This is made most evident in the place where Kant introduces his own Copernican Revolution:

Up to now it has been assumed that all our cognition must conform to the objects; but all attempts to find out *something about them a priori through concepts that would extend our cognition* have, on this presupposition, come to nothing.

Hence let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition, which would agree better with the requested possibility of an *a priori* cognition of them, which is to establish something about objects before they are given to us. (Bxvi)

The assumption that “all our cognition must conform to the objects” and the assumption that “the objects must conform to our cognition” are two grounding models of the reference of representations to objects. In this context, they are employed for the reference of the intellectual concepts, but for testing whether we could make progress in explaining the synthetic *a priori* truths.

Kant further suggests that the relationship between the synthetic *a priori* truths and the model that pure concepts ground objects is nothing but the relationship between *data* and a *theory*. Kant identifies the existence of synthetic *a priori* propositions as *data* and identifies the relation of representation to object as *theory*, or rather, the *assumption of a certain theory*. If the existence of synthetic *a priori* propositions is regarded as data, it means that their existence is non-negotiated. Kant would not argue with those who deny the existence of synthetic *a priori* propositions, just as he would not argue with those who deny the existence of the regularity in nature.

Synthetic *a priori* propositions become a definitive criterion to examine whether all the theories that had been put forward in history are successful. If explaining the possibility of synthetic *a priori* propositions is *the* problem of metaphysics, then we can define the success of any metaphysical system as such: for any metaphysical theory *T*, *T* is a successful theory if and only if *T* explains the possibility of synthetic *a priori* propositions. Even Kant’s own theory is no exception. Kant’s own theory could be rejected as well if it does not explain the possibility of synthetic *a priori* judgments. Therefore, it also enables the reader to see whether transcendental philosophy *fulfills the promises* it makes.

If all previous philosophical theories are nothing but a series of failures, it is very natural to conjecture that it must be the case that the previously failed systems might share a common false assumption in their theories. Guided by this idea, the task now is not only to *revise* those old theories but also to *identify* and *abandon* the false assumption to accommodate with data.⁵⁸ In the case of explaining synthetic apriority, the assumption Kant makes explicit and brings before us is the model representation and object, or of mind and world. If Kant’s conjecture stands, then the correct grounding model of representation and object should help to generate *the explanation of the data* of synthetic *a priori* propositions.

One might ask why Kant does not instead continue taking the reference of representation to object as data. As we have seen in 1.1, the ground of the reference of representation to object precisely presupposes that the existence of the semantic relation of categories to objects. In other

⁵⁸ Any philosophical theory makes a set of assumptions: some of them are more explicit, while some of them are more implicit. Consider Aristotle’s classical foundationalist theory of the structure of knowledge and justification. One crucial assumption Aristotle makes is that the world is knowable, or we do have knowledge.

words, Kant makes the *a priori* reference as data. If we formulate Kant's puzzle in terms of the ground of the reference of categories to objects, then we are assuming the *reference* of concepts. If we formulate Kant's puzzle in terms of the ground of the synthetic *a priori* propositions, then we are assuming the *truth* of propositions. I think that we should not overestimate the difference. As we will see, Kant does offer such an argument from the reference of categories in 'Transcendental Deduction. While "the manner of presentation" alters, "the ground of explanation" remains unchanged. I think that the most important reason is perhaps that such that they are more suitable to be the point of departure. The truth of synthetic *a priori* propositions is instantiated by those successful sciences, and widely recognized by different philosophers. By contrast, different philosophers vary in what kind of representation exists and whether it should play a key role, so the reference of representation is called into question at the very beginning.⁵⁹ In fact, we have found that even in the Herz letter different philosophical systems seem to prefer different kinds of representation.

In the following chapters, we will see how Kant takes three philosophical paths under consideration and finally rejects them. The reason all philosophical paths are assessed to fail precisely because none of them can successfully explain the possibility of synthetic *a priori* propositions. The fact that the inability of the previous philosophical systems cannot elucidate the "mystery" is merely a *symptom*. Kant's final *diagnosis* is that all of them assume an incorrect model of mind and world. The fact the previous attempts do not challenge the traditional model of mind and world is the ultimate reason why they are doomed to fail.

1.4 Reconstruction of the Philosophical Spectrum

1.4.1 Lists of Systems

Kant surprisingly has a quite complete list of philosophical systems at his disposal as early as in the Reflection 4275, which is dated to one year or two immediately before his 1772 letter to Herz. In R4275 Kant writes:

Intuitions of the senses (in accordance with sensible form and matter) yield synthetic propositions that are objective. Crusius explains the real principle of reason on the basis of the *systemate praeformationis* (from subjective *principiis*); *Locke*, on the basis of *influxu physico* like *Aristotele*; *Plato* and *Malebranche*, from *intuitu intellectuali*; we, on the basis of *epigenesis* from the use of the natural laws of reason.

⁵⁹ From the truth-conditional semantical point of view, truth seems to be more fundamental.

The common sense of human beings, *sensus veri et falsi*, is a *qualitas occulta*.⁶⁰ (AA 17: 492)

Since the real principles of reason are taken as the target of explanation, it seems to be assumed without proof that everyone believes that there are such principles. I take “the real principle of reason” in question as the equivalent expression of “the real principle” formulated in 1772 letter to Herz. Whether the real principles pertain to reason or to understanding does not matter, for Kant’s the distinction between understanding and reason has not yet been well-established, and it is not surprising to find the frequent interchangeable use of understanding and reason within. Even in the Herz letter, Kant is careless about the difference between understanding and reason. Kant writes, for instance, “I sought to reduce transcendental philosophy (that is to say, all the concepts belonging to completely pure *reason*) to a certain number of categories” (AA 10:132). However, Kant was previously talking about the intellectual concepts that pertain to human *understanding*.

According to Kant, for the explanation of the real principles there exist five alternatives: the preformation-system represented by Crusius, the system of physical influx by Aristotle and Locke, the system of intellectual intuition represented by Plato and Malebranche, and the system of epigenesis advocated by Kant himself, and finally the system of occult qualities for which no representative is mentioned. For explaining the real principles, the five rival systems appeal respectively to a variety of representations as the key to the solution: Aristotle and Locke resort *a posteriori* acquired concepts, Plato and Malebranche to *a priori* innate intuitions, Crusius to *a priori* innate concepts, and Kant to *a priori* acquired concepts. It is remarkable that this early list of the philosophical systems is quite complete; it includes all the three main positions to which that Kant will devote his most efforts in his subsequent years. As we shall see in the immediate following, the identification of and insistence on these five basic rival systems are retained well into the 1780s.⁶¹

This list of rival philosophical systems in the early 1770s is far from the only one in Kant’s writing. Kant’s most detailed discussion of the different paths taken by rival theories is contained in R5637 written in the 1780s:

⁶⁰ The focus of this note is on the different ways of the acquisition of putative pure representations, which should be a task for metaphysical deduction or transcendental derivation, rather than for transcendental deduction. Different ways of the acquisition of putative representation yield different *kinds* of representation. As I have noted earlier, each kind of representation is matched with a distinctive mode of the ground of the reference of representation to object. Therefore, it is not surprising that Kant attaches the labels of these systems to the grounding models of the reference of representation to object as well.

⁶¹ In fact, there is still one position left out in this list; however, it does not enjoy as the same status as the five positions do.

Reason, which will not let this restriction⁶² stand, supposes that our experience and also our *a priori* cognition pertain immediately to objects and not first to the subjective conditions of sensibility and apperception and by their means to unknown objects that can be represented only through the former. Hence it]... strikes off on different paths. 1. The empirical path and universality through induction. 2. The fanatical path of intuition through the understanding. 3. That of predetermination through innate concepts. 4. The *qualitas occulta* of the healthy understanding, which gives no account. [P. III.] If one concedes this, then all critique of pure reason is suspended and the door is opened wide to all sorts of fiction. Hence it belongs to the discipline of pure reason to investigate it and to bar these paths in accordance with its discoveries. (AA 18:272)

Kant's study of paths reappears with all its essentials intact in the same Reflection:

Not only does reason overlook the ideality of the objects of the senses, it also bristles against this as it does against everything that restricts its sphere of influence. Hence it is necessary to investigate the paths that it takes. The first is empiricism. [...] There thus remain epigenesis, mystical intuition, and involution. Finally there is also the *qualitas occulta* of common reason. (AA 18:273)

It is difficult to overestimate the systematic importance of R5673 for understanding the philosophical spectrum Kant keeps in mind. Here Kant explicitly claims that they are *the paths of reason*. In R5649, Kant also claims that they are *the paths of metaphysics*. (AA 18:296)⁶³ By paths Kant understands radically distinct systems that differ from each other not only in specific details but also in fundamental orientations. In the hope of resolving the secret of metaphysics, different paths of reason resort to different kinds of representation and commit to different models of the grounding relation of representation to object.

In his mature philosophy, Kant offers a most complete description of the alternative paths of metaphysics. According to the first quotation, Kant enumerates four paths that could lead us astray: (i) the empirical path of induction; (ii) the fanatical path of intuition through the understanding; (iii) the fanatical path of predetermination through innate concepts; and (iv) the path of occult qualities of the healthy understanding.

The empirical path is *the system of physical influx*, or empiricism, endorsed by Aristotle and Locke. This first path aims at acquiring absolutely universal (and necessary) propositions through inductive inference. The fanatical path of intuition through the understanding is *the system of hyperphysical influx*,

⁶²The restriction in question refers back to the fact that the appearances "are given only through the *synthesis*" (AA 18:272).

⁶³ R5649 is dated to the latter half of 1780s.

or that of mystical intuition, represented by Plato and Malebranche. This second path characteristically postulates an understanding which can intuit by means of which ideas are immediately apprehended. The fanatical path of predetermination through innate concepts is *the system of pre-established intellectual harmony*, or that of *preformation* or *involution*, represented by Leibniz and Crusius. This third path attempts to make appeal to inborn concepts to formulate judgments. The path of occult qualities of the healthy understanding is the system of common sense. While Kant does not mention the representatives, from the *Prolegomena* we know that the system of common sense or healthy understanding is represented by Reid, Oswald, Beattie, and Priestley. (AA 4:258) This fourth path is characteristic of invoking common sense without giving further explanation.⁶⁴

1.4.2 The Spectrum Reconstructed

The above list of five philosophical systems includes ancient philosophers as well as modern philosophers. Initially, this list appears haphazard. On a closer reading, it is by no means an arbitrary enumeration of the historically preeminent predecessors that strikes Kant. Rather, I believe that the paths of reason or metaphysics in the list is selected in a logically merited manner: they are not only mutually exclusive but also jointly exhaustive concerning some specific philosophical questions. As we will see, the question that concerns all of these paths is nothing but what Kant dubs “the secret of metaphysics”, namely, the ground of the reference of representation to object.

In the following, I would like to show how these paths are logically rigorously ordered. Let’s first consider a general case in metaphysics. If x and y are systematically correlated, there are following basic models for explaining the co-variation in terms of the ground of reference: (i) no ground model, (ii) real ground model (iii) common ground model, (iv) infinite ground model. They are not mutually exclusive, though jointly exhaustive:

(1) If the relation in question *exists*, then the relation is either *contingent* or *necessary*.

(1.1) If the relation of x to y is *contingent*, there is *no ground* for this relation.

(1.2) If the relation of x to y is *necessary*, there is *some ground* for this relation, and the relation is either ideal or real.

⁶⁴ According to the theory of healthy understanding, the truth and falsity can be simply judged on the basis of “common sense of human being”, in other words, the truth or falsity is simply being asserted without being accounted. This belongs to the least discussed systems.

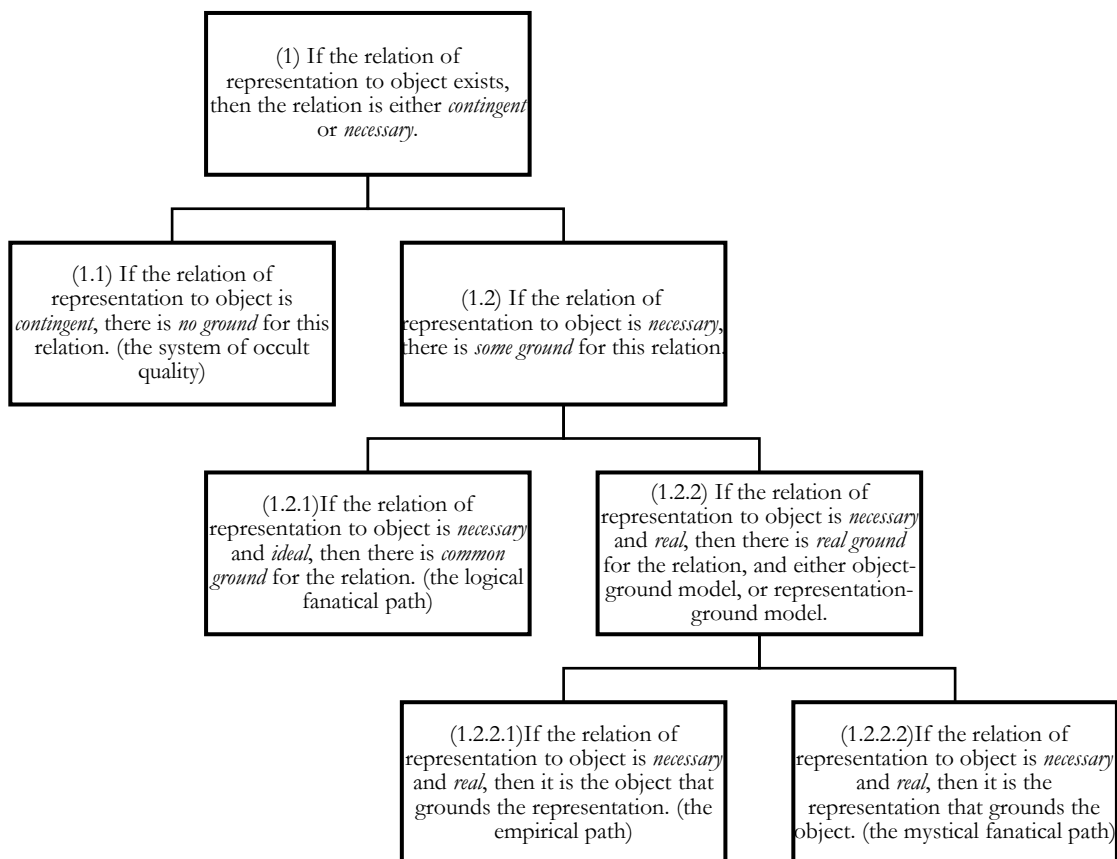
(1.2.1) If the relation of x to y is *necessary* and *ideal*, then there is *common ground* for the relation.

(1.2.2) If the relation of x to y is *necessary* and *real*, then there is *real ground* for the relation.

(1.2.2.1) If the relation of x to y is *necessary* and *real*, then it could be case that x grounds y .

(1.2.2.2) If the relation of x to y is *necessary* and *real*, then it could be case that y grounds x .

When the general models of ground are applied to the reference relation of representation and object, then we have the following picture:



Picture 1

According to this reconstruction, we have a spectrum of the philosophical positions that are mutually exclusive and jointly exhaustive. I believe that I could fill the positions in the spectrum with Kant's list of philosophical systems: (i) the system of occult qualities assumes a *no ground model*;

(ii) the system of pre-established intellectual harmony assumes a *common ground model*,⁶⁵ (iii) the system of physical influx assumes a real ground model in one direction; (iv) the system of *hyperphysical influx* assumes a real ground model in the other direction.

Therefore, Kant's list of the systems is by no means arbitrary. Rather, it is a carefully registered list where all possible alternatives to the problem of the ground of the reference of representation to object are *mutually exclusive* and *jointly exhausted*. Since the four rival paths of metaphysics are correspondent to the models of representation and object, it follows that the four paths of metaphysics are also mutually exclusive and jointly exhaustive.

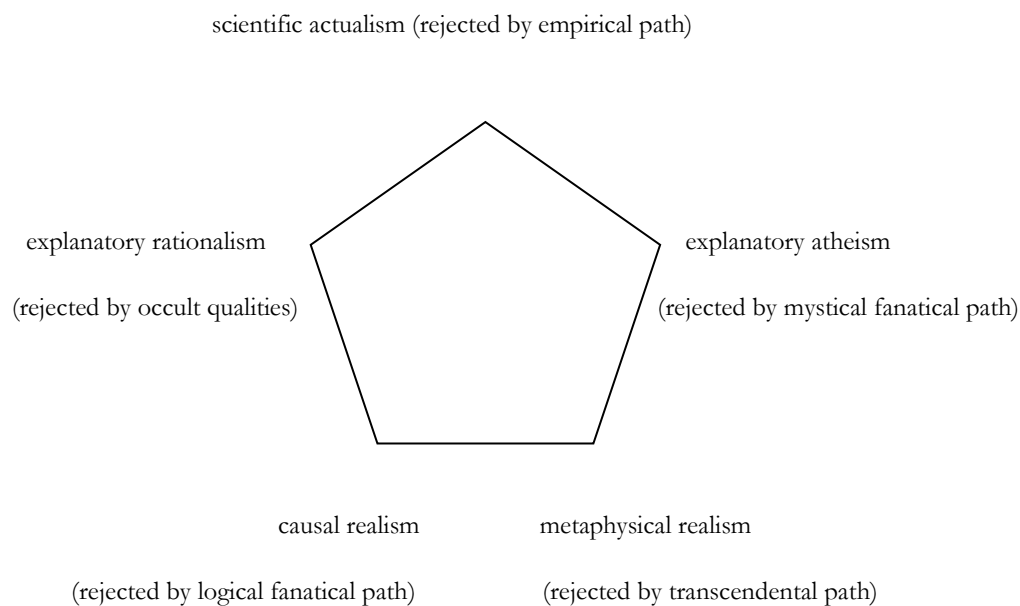
For one thing, all these four rival paths are not only *incompatible with* each other, but also *irreducible to* each other. When one adopts some system of explanation, it is impossible for him to adopt any other systems *at the same time*. The *actual* philosophical system is complex, however. It does not prevent one system from being adopted by another when some assumption is held temporarily, or when some complementary argument is made.⁶⁶ For another, it seems impossible to conceive any further system that could be taken into account. Of course, the tree of the grounding model can be further divided as long as some underlying assumption is not detected. No matter how it is further divided, and no matter how fine-grained the modal status of each putative case is, it does not prevent the now fourfold division from being extensionally exhaustive. The list means something more for Kant: it means that the more fine-grained putative modal case is not instantiated in history and represented by any philosopher. It is not an accident. It means that the more fine-grained modal alternatives are philosophically unmotivated.

1.5 Paths and Assumptions

All these philosophical paths take into account the following five philosophical desiderata: the scientific actualism, the explanatory rationalism, the causal realism, the epistemic atheism, and the metaphysical realism. And each of them cannot accept all the desiderata at the same time. We could illustrate this point by the following picture:

⁶⁵ It is noteworthy that the model of common ground has two further species: the particular pre-established harmony and the general pre-established harmony.

⁶⁶ See Chapter 3 for the former case. The mystical fanatical path is characteristic of the model that representation grounds object. However, the ensuing complementary argument makes it liable to collapse into pre-established harmony. See chapter 2 and chapter 4 for the latter case. Both the empirical path and the logical fanatical path are taken to be committed to the system of occult quality when additional assumption is made.



1.5.1 The Explanatory Rationalism

The *explanatory rationalism* is a term dubbed by Jonathan Bennett. It refers to the view that everything can be explained. In *A Study of Spinoza's Ethics*, Bennett writes: “Spinoza assumed that whatever is the case can be explained—that if P then there is a reason why P. I call this ‘explanatory rationalism’. It is the refusal to admit brute facts—ones which just *are* so, for no reason.”⁶⁷

Although Kant does not make explanatory rationalism explicit in the *Critique*, there are traces in his notes that he does endorse this view at least as a methodology. In Reflection 5637 dated to 1780s, Kant writes: “[n]ow reason abhors principles that are not its own work. It is its maxim to assume that everything can be explained. Consequently no sensible primitive intuition.” (AA 18: 275) Whereas in this note the maxim of reason that “everything can be explained” is specifically targeted to “sensible primitive intuition”, there should be little doubt for its generality in the application. It is clear that explanatory rationalism is Kant’s view. It is far from clear, however, what the nature of explanatory rationalism is.

It is not difficult to see that explanatory rationalism, if true, entails *metaphysical rationalism*. If everything can be explained, and *if everything is explained in such a way*, then it amounts to saying that

⁶⁷ See Bennett 1984, 29.

everything has a metaphysical ground. Then, we fall back into the principle of sufficient ground (or reason) and its unwelcoming consequence of necessitarianism. It is difficult to attribute to Kant such a radical view. It flatly contradicts with Kant's endeavor to restrict the principle of sufficient ground into experience in his Second Analogy. One might ask why Kant resurrects it after he has buried it.

No matter how to read Kant in the light of critical philosophy, I think that it is difficult to cut off its relation to the principle of sufficient ground. Even more I think that Kant indeed implicitly assumes *a qualified version of metaphysical rationalism*. The notorious question of the noumenal affection is only the symptom of this qualified metaphysical rationalism.⁶⁸ What we should be cautious about is not metaphysical rationalism, but its unqualified version. As we will see, Kant modifies the metaphysical rationalism with important qualifications, and the qualifications are nothing but his other two great assumptions.

Explanatory anti-rationalism claims that the world that is required to explain is the fundamental level of reality such that there is no further ground. That is, the world is simply the way it is, and there is no further need not to explain it. The system of occult qualities is precisely committed to the ontological version of explanatory anti-rationalism. It is not difficult to see why the system of occult qualifies is the antithesis of explanatory rationalism. While explanatory rationalism claims that *everything* can be explained, in the system of occult qualifies the healthy understanding “gives *no* account” (AA 18: 272). In the same Reflection, Kant later writes that “[t]he so-called healthy understanding is an *asylum ignorantiae*” (AA 18: 275).

By charging it as the refuge for the ignorant, Kant's unmistakable dismissal of occult qualifies is understandable. Remember that “reason abhors principles that are not its own work”, In R4783 dated to the period between 1775 and 1779 Kant says “*qualitates occultae*” “are contrary to reason”. Reason abhors occult qualities most. It is also confirmed by R5654 dated to the period between 1788 and 1789:

I [~~crossed out: still work my way toward~~] climb even through difficult subtleties to the peak of principles, not so much as if the healthy understanding would not be able to get there without this detour, but

⁶⁸ The metaphysical rationalism is a deeply plausible view. In physics physicists believe that the heat can be explained in terms of molecular movement. They do not explain the physical constant such as the speed of light. In philosophy some philosophers believe that the world consisting of the concrete individual particulars is not the fundamental level of reality, and they believe that the phenomena of the agreement of attributes of particulars can be further explained by invoking universal. But they do not think that the universal needs to be further explained. To some extent, the reason is that they do not want to have the explanation *ad infinitum*.

rather in order to entirely rob of power all of the sophistical subtleties that are raised against it. (AA 18:313)

In his 1786 *Metaphysical Foundations of Natural Science*⁶⁹, Kant writes:

In the doctrine of nature, the absolutely empty and the absolutely dense are approximately what blind accident and blind fate are in metaphysical science, namely, an obstacle to the governance of reason, whereby it is either supplanted by fabrication or lulled to rest on the pillow of occult qualities. (AA 4:532)

In fact, there are two versions of explanatory anti-rationalism. What Kant intends to argue against in the above is an ontological version of explanatory anti-rationalism. The other version of explanatory rationalism is epistemological, and it claims that we are *not entitled* to search the ground of the way the world is. That is, the world is all that seems to be the way it is such that we *cannot* explain it. In Chapter 2 we will find that certain kind of Humean philosophy ends up with falling into this epistemological version of the explanatory anti-rationalism.

1.5.2 The Causal Realism

Causal realism is the view that if x and y are systematically co-varied, their agreement must be real: either x grounds y or y grounds x . This view is the negation of the common ground model. According to the common ground model, if x and y are systematically co-varied, their agreement can be ideal, namely, there is no real connection between x and y , and the phenomena of the agreement of x and y are caused by a common ground.

This assumption is built into the way in which Kant formulates the dilemma of ground of representability. In §14 Kant articulates the dilemma as follows:

There are only two possible cases in which synthetic representation and its objects can come together, necessarily relate to each other, and, as it were, meet each other: Either if the object alone makes the representation possible, or if the representation alone makes the object possible. If it is the first, then this relation is only empirical, and the representation is never possible *a priori*. And this is the case with appearance in respect of that in it which belongs to sensation. But if it is the second, then since representation in itself (for we are not here talking about its causality by means of the will) does not

⁶⁹ Abbreviated as *Metaphysical Foundations* thereafter.

produce its object as far as its **existence** is concerned, the representation is still determinant of the object *a priori* if it is possible through it alone to **cognize something as an object**. (A92/B124-125)

In the A-Deduction it seems that Kant merely considers the case of a dilemma while overlooking the possibility that there is a middle way between the two horns. In fact, it is perfectly possible that a representation agrees with an object neither in virtue of the fact that the object makes the representation possible nor in virtue of the fact that the representation makes the object possible, rather in virtue of the fact that a common cause makes both the representation and the object possible.

In the entire A-Deduction Kant does not say anything about the middle way of the common ground model. In the B-Deduction, by contrast, Kant takes this possibility into account, and it seems to suggest that Kant intends to fill the previous gap in his argument. In §27 “the Result of this deduction”, Kant still writes that “there are only two ways in which a **necessary** agreement of experience with the concepts of its objects can be thought: either the experience makes these concepts possible or these concepts make the experience possible” (B166-167). After introducing the dilemma, Kant continues to write that the previous dilemma leaves open “a middle way between the only two, already named ways, namely, that the categories were neither **self-thought** *a priori* first principles of our cognition nor drawn from experience” (B167).

However, the form of the dilemma is retained, and the neglected possibility is introduced as an *afterthought*. One might wonder why Kant does not replace the old dilemma with an explicit trilemma. In my view, the manner in which Kant addresses the alternative of the “middle way” indicates that Kant does not think the third possibility of “the middle way” as a *genuine alternative*. As I understand it, the fundamental reason lies in that “the middle way” flatly contradicts with *causal realism*, one of Kant’s most underlying assumptions he never makes explicit in the *Critique*. That is why Kant does not formulate an explicit trilemma.

What immediately guides Kant’s formulation of the dilemma of the ground of representability is his own peculiar conception of *objectivity*. According to Kant, a representation is objective or has relation to object if either the representation makes the object possible or the object makes the representation possible. To have relation to object is *not* simply a matter of correctly mirroring the reality. The mirroring relation of representation must presuppose a causal track. The track can only have two directions: one is from representation to object, and the other is from object to representation. The middle way fails to be genuinely objective precisely because it fails to be either

case of the two possibilities. This characteristic conception of objectivity rests upon the general assumption of causal realism that the ground of real relation must be a *real ground*.

1.5.3 The Epistemic Atheism

According to epistemic atheism, we are capable of explaining our knowledge in particular and all our mental states in general without appeal to God. The two great representatives of empiricism Locke and Hume could be seen as the initiator and defender of the deeply plausible view that might be labeled as epistemic atheism. In their study of human understanding, God plays no role in accounting for the ways of idea, the basic building blocks of human mentality.

In Descartes, our privileged access to mind is merely epistemological: the mind is better known than the body. God still plays an important role in endowing us with innate ideas indispensable for the certainty of human knowledge. With the expelling of innate ideas from mental geography by Locke, our privileged access to our mental states is not only epistemological but also physiological. The generation, passing-away, and other behaviors of ideas have nothing to do with God. It only has something to do with our understanding. The realm of the human mental gains independence from the absolute and ubiquitous dominion of God. In one important sense, human beings have the dominion over their mental realm just as God has His dominion in the physical realm. God could still play an omnipotent and omnipresent role in the physical universe; He is the creators of the creatures, and He is the legislator of the laws of nature. But it does not play any role in any episode of our mental life in general and in accounting for human knowledge in particular.

Nowadays, epistemic atheism is almost a truism. However, in the seventeenth and eighteenth century, the idea of epistemic atheism was astonishingly revolutionary in Germany. It is the view held by the minority, rather than by the majority. In the long run, it can be seen as an early phase of the naturalization of philosophy. The dominant view at that time was its negation, epistemic theism, and there are various forms of epistemic theism.

According to the explanatory rationalism, everything can be explained. If explanatory rationalism literally quantifies over everything that exists, it naturally invites the notorious infinite regress in explanation. Taken metaphysically, the explanatory infinite regress collapses into the view that everything has a ground and that there exists no first ground.

The general positive response to infinite regress is to find a terminator which can stop the infinite regress. This terminator of regress must be an ungrounded ground, or unexplained *explanan*. Traditionally, the role of the terminator of the regress is played by God. Pre-critical Kant is non-

exception. In *The Only Possible Argument in Support of a Demonstration of the Existence of God* (1763)⁷⁰, Kant takes over the idea by arguing that God is “the ultimate real ground of all other possibilities” (AA 2:83).

In the critical period, however, Kant expels the role of God from the human mental realm. One reason is that we do not know *a priori* that God plays the role of the terminator. In analogy to Kant’s pre-critical view that we cannot analyze the concept of the world that exists from the concept of the will of God, Kant can equally claim that we cannot analyze the concept of the common cause of representation and object from the concept of God.

Furthermore, there is deeper worry about the explanatory legitimacy of the move to appeal to God. God is not merely a common cause; rather it is an *infinite cause*. As an infinite cause God can cause any possible thing and thus God can be invoked as a *general cause*. Since everything can be explained by appealing to God. The worry is that to say something is caused by God is to say nothing informative. The explanation by appeal to God amounts to give no explanation at all.

In the following three chapters, I will show how these different paths are committed to these assumptions, and why they are led astray.

⁷⁰ Abbreviated as *The Only Possible Argument* thereafter.

Chapter 2 Against the Empirical Path

2.1 Introduction

Empiricism is a generally successful position. In explaining a certain domain of knowledge, it is not so much the dominant view as almost the only correct view. On some point, even the most robust rationalist would not challenge it. Empiricism survives and thrives today; even many contemporary philosophers are self-proclaimed empiricists. Furthermore, empiricism is not only plausible but also resilient. Much room can be left with empiricists if empiricism is properly qualified. It is even incorporated and appropriated by many opponents. For instance, Kant himself is an example. Another example is Bertrand Russell, who is also a preeminent Platonist. In the recent several decades the reductive metaphysics associated with empiricism has been kept alive in contemporary philosophy; Hume was hailed as the hero of contemporary metaphysics.

It is noteworthy that for Kant empiricism is the empiricism in an *unqualified* manner. A qualified and hybrid version of empiricism is not empiricism. Then, what precisely is the criterion of empiricism? For Kant, the essential character of the empirical path lies in the unique grounding model: the object makes the representation possible. The empiricist epistemology is only the suprastructure of this metaphysical foundation. Any position incompatible with this grounding model cannot be called empiricism. For example, Hume makes an appeal to analysis to explain logic and mathematics, while Russell resorts to intellectual acquaintance to explain the knowledge of universals. According to this criterion, Hume is an empiricist, for analysis is consistent with the grounding model, while Russell is not an empiricist, for the rational insight runs counter with the model. Neither is Kant an empiricist despite his incorporation of some key elements of empiricist epistemology, since his famous Copernican Revolution goes in the opposite direction to that of empiricism.

For Kant, the empiricism is the most viable position in his philosophical spectrum. In *Critique*, Kant even creates the impression that empiricism is the only rival theory to his transcendental philosophy with regard to the problem of the deduction of categories. Kant does not merely claim that transcendental deduction is distinguished from empirical deduction (derivation) since the former concerns the lawfulness (*quid juris*) while the latter concerns the fact (*quid facti*). (A84/B116) Kant even speaks as if transcendental deduction and empirical deduction are the only two alternatives with respect to the question of the objective reality of categories. In rejecting the empirical deduction of categories, Kant writes:

It is therefore clear that only a transcendental and never an empirical deduction of them can be given, and that in regard to pure *a priori* concepts empirical deductions are nothing but idle attempts, which can occupy only those who have not grasped the entirely distinctive nature of these cognitions. (A87/B119)

Given the assumption that either the empirical path or transcendental path is correct, Kant makes the inference that transcendental deduction must be the correct path precisely *because* the empirical deduction is incorrect.

However, this view is incomplete, if not mistaken. During the silent decade empiricism as the only viable alternative to transcendental philosophy is only a temporary result of Kant's journey in pursuit of the answer to the question of the ground of the relation of representation to object. Nonetheless, there is an element of truth in the appearance of the empirical path as the only alternative to the transcendental path. Empiricism is an explanatorily conservative position free from "all sorts of wild notions and every pious and speculative brainstorm" (AA 10:132). In fact, it turns out that empiricism is viable precisely because it is the only philosophy with which Kant shares the same *explanatory norm*. Kant's basic charge is not that empiricism is *explanatorily illegitimate*, but that it is *explanatorily inadequate*.⁷¹

Both Kant and empiricists are committed to the assumption that might be labeled as the epistemic atheism or even the mental atheism. According to the epistemic atheism, our endeavor of explaining our knowledge in particular and our mental states in general should not resort to God. In fact, the two great representatives of empiricism, Locke and Hume, could be seen as the defenders of the deeply plausible view.⁷² For Locke, our privilege to our mental states is not only epistemological but also metaphysical. The realm of the mental gains independence from the absolute and ubiquitous dominion of God. God creates our physical constitution, but He does not play any constitutive role in our mental life.⁷³ The idea of *epistemic atheism* is revolutionary compared to the dominant view in German philosophy. Kant is a continental follower of this tradition.

As a result, Kant's attack on the empirical path is radically different from his criticism on the fanatical path that will be taken under scrutiny in subsequent two chapters. One primary controversy between Kant and empiricists is concentrated on the identification and interpretation

⁷¹ Occasionally, Kant attributes to Locke the view that synthetic *a priori* truths are actual. More famously, in the *Critique* Kant believes that Locke attempts to make empirical deduction of *a priori* knowledge. Therefore, it is not that accurate to accuse empiricist project of explanatory inadequacy. However, under the pressure of fundamental limitation of induction, empiricist soon abandons this line of attempt. We'd better see empiricist as more aware of the limitation of induction such that they *in effect* do not acknowledge the existence of synthetic *a priori* knowledge.

⁷² Kant might believe that another classical empiricist George Berkeley is closer to Plato and Malebranche. See Kenneth P. Winkler (2008).

⁷³ For instance, Malebranche's famous doctrine of vision in God stands in opposition to this idea.

of the domain of knowledge. Therefore, they disagree with each other primarily on *what the premise of the argument is*, rather than on *how the argument should proceed*. As we will see, beneath their difference lies a much more profound opposition: empiricists endorse a methodist epistemology, while Kant embraces a particularist epistemology.

In Kant's view, the ancient philosopher Aristotle and modern philosopher Locke are the paradigmatic representatives of the empirical path, because both of them are the followers of the system of physical influx, which is committed to grounding model that "the object makes the representation possible".⁷⁴ In the following, I will put aside Aristotle and focus on Locke. Kant's reception of Locke is peculiar; Locke's empiricism is understood as an attempt to explain the existence of synthetic *a priori* propositions. In fact, Locke seems to have little interest in explaining the synthetic *a priori* propositions. In addition to Locke, I will also spend some time on Hume's distinctive system, which is regarded as a consistent version of empiricism. First of all, Hume does say something important on *a priori* knowledge, which marks a great progress in the empirical path. Moreover, the *methodism* presupposed by Hume constitutes the antithesis of the *particularist* strand in Kant's epistemology. Finally, it turns out how the empiricism consistently developed by Hume paradoxically results in a species of explanatory anti-rationalism, which is inconsistent with the causal realism assumed by Locke's empiricism. The literature on Kant and empiricism is abundant, so one might wonder whether there is anything interesting that could be said.

In section 2.2, I will first reconstruct the epistemology of the empirical path and delineate different routes of Kant's criticisms. As Kant himself makes clear, there are two lines of arguments against the empirical path: the argument from sciences, and the argument from experience. In section 2.3, I will quickly go through this more familiar argument from mathematics and penetrate to its assumption and its deepest divergence from Kant in approach: the empiricists are methodists, while Kant is a particularist. In section 2.4, I will take a more careful analysis of this less known argument from experience. I will argue that Kant has only one unified conception of experience and that Kant's claim that experience cannot teach necessity and his claim that experience contains necessity are perfectly compatible. In section 2.5, I will suggest that in denying modality the Humean metaphysics is committed to the system of occult quality, which does not only deprive the system of the explanatory power but also turns against to the grounding model of Locke's physical influx.

⁷⁴ In fact, the more paradigmatic contemporary representatives of radical empiricism are John Stuart Mill and W.V.O. Quine.

2.2 The Radical Empiricist Epistemology

The central tenet of radical empiricist epistemology can be summarized as follows:

(REE1): all human knowledge is derived from experience.

The radical empiricist epistemology could be understood as formulated in different terms and emphasizing different things. It can be understood as a claim on the *scope* of knowledge that (F1) *all human knowledge* is derived from experience. It could also be understood as a claim on the *source* of knowledge that (F2) all human knowledge is derived from *experience*. Or more explicitly, it can be read as: (F2*) experience is the *only* source of human knowledge.⁷⁵

In spite of their difference, the source formulation and the scope formulation equivalently express the same thing. If experience is the *only* source of human knowledge, then *all* human knowledge is derived from experience. *Equivalently*, if *all* human knowledge is derived from experience, then experience is the *only* source of human knowledge.

Interestingly, Kant offers two routes of criticism respectively against the scope claim and the source claim of radical empiricist epistemology. Both objections are not something entirely new; they are reminiscent of Leibniz's two fundamental objections to Locke in his *New Essays on Human Understanding*.⁷⁶

Along the first route, Kant raises the *mistake objection* to the source claim of radical empiricist epistemology. Kant holds that Locke "committed the error of taking the occasion for acquiring these concepts, namely experience, as their source" (AA 18:14).⁷⁷ In the Introduction to 1787 *Critique*, Kant famously writes that "although all our cognition **commences with** experience, yet it does not on that account all **arise from** experience" (B1). By noting this difference, Kant is trying to highlight that there is an important distinction between *the source of knowledge* and *the occasion of knowledge*. Both source and occasion can be understood as the species of the genus of cause. Kant sometimes ascribes the role of cause to occasion and call it "*occasional cause*" (A86/B118). When it

⁷⁵ It also could be understood as committing to a more implicit and more fundamental claim that underlies empiricist epistemology: (3) the claim on *means*: all human knowledge *is derived from* experience. In fact, it captures the grounding model of "the object makes the representation possible".

⁷⁶ See Leibniz 1996.

⁷⁷ Kant writes in R4866 as follows: "Locke a physiologist of reason, the origin of concepts. He committed the error of taking the occasion for acquiring these concepts, namely experience, as their source. Nevertheless he also made use of them beyond the bounds of experience." (AA 18:14). The consequence of Locke's mistake of occasion for source is that he attempts to derive the concepts of understanding for experience solely on the grounds.

comes to the origin of cognition, source and ground are used interchangeably, and thus the source of knowledge can be seen as the genuinely *original cause*. In the case of empirical concepts and empirical knowledge, the source of knowledge and the occasion of knowledge are co-extensive, and thus their distinction seems to be insignificant. In the case of pure concepts and *a priori* knowledge, however, the difference is significant.⁷⁸

Along the second route, Kant levels the *poverty objection* that the scope claim of radical empiricist epistemology is explanatorily inadequate because it fails to account a great number of phenomena. In fact, the poverty in the scope of empiricist epistemology is precisely rooted in its mistake of the source of knowledge. Since the occasion thesis that *all* human knowledge is *occasioned by* experience is true, if it is taken in conjunction with the mistake of experience as *the occasion of knowledge for the source of knowledge*, it immediately follows that all human knowledge is *derived from* experience.

Since the poverty objection and the mistake objection are substantially equivalent, in the following I will concentrate on examining Kant's arguments based on his poverty objection. I leave aside Kant's mistake objection not because Kant does not develop arguments along this route, neither because these arguments are not important.⁷⁹ Rather, I focus on Kant's scope objection simply because the arguments along the route is more congenial to the presentation of my arguments such that they could reveal better Kant's premise and strategy in this campaign against empiricism.

Kant's objection to the *explanatory inadequacy* of radical empiricist epistemology is encapsulated in the Reflection 5637 dated to the early 1780s:

Hence it is necessary to investigate the paths that it takes. The first is empiricism. But not only does *a priori* mathematical cognition refute the falsehood of this putative origin of our cognition, but also the concepts that are present in experience contain a necessity (cause) that experience cannot teach. (AA 18:273)

This Reflection is noteworthy precisely because it concisely contains Kant's two most important arguments against the poverty of the scope of empiricist epistemology: one is the

⁷⁸ As Kant remarks, "in the case of all cognition, we can search in experience, if not for the principle of their possibility, then for the occasional causes" (A86/B118).

⁷⁹ For instance, Kant's arguments in *Metaphysical Exposition* can be seen as developed along the line of source *Critique*. Two source objection! Kant argues that there are *a priori* elements in our faculty of sensibility, which are largely ignored by his predecessors and contemporaries.

*argument from sciences*⁸⁰, and the other is the *argument from experience*. In the following, I will examine them one by one.⁸¹ As we shall see, the basic idea of Kant's argument against empiricist epistemology is quite simple: empiricist epistemology as a *theory* is falsified by some *fact*. However, the controversy between empiricism and Kant is not easy to settle, for it is difficult for both parties to reach consensus on what counts as *fact*. In exploring Kant's engagement with empiricism, we will see both parties differ not only in some specific assumptions but also in the conception of the approach to epistemology.

2.3 The Argument from Sciences

The argument from mathematics figures as Kant's *master argument* against empiricist epistemology.⁸² In the Introduction to 1787 *Critique*, Kant betrays his view for the actuality of sciences: “[n]ow it is easy to show that in human cognition there actually are such necessary and in the strictest sense universal, thus pure *a priori* judgments. If one wants an example from the sciences, one need only look at all the propositions of mathematics; if one would have one from the commonest use of the understanding, the proposition that every alteration must have a cause will do” (B4-B5).

Here Kant explicitly endorses the actuality thesis and the apriority thesis of sciences (including pure mathematics and pure physics):

(1) Mathematics is actual.⁸³

(2) Mathematics is *a priori*.⁸⁴

The conjunction of (1) and (2) entails the actuality of *a priori* knowledge in sciences:

⁸⁰ Here I use the unusual plural form “sciences” to highlight the different and limited discipline of science in Kant's particular conception.

⁸¹ Because mathematics is not our focus in Transcendental Deduction, I will call more attention to the second argument from experience.

⁸² Traditionally, the argument is understood as the objection to induction.

⁸³ For Kant to say that a science is actual is to say that it is *correct*; for instance, Kant mentions that a genuinely scientific proposition is “real and correct” (A209/B254). For Kant's historical account of the actuality of science see the Preface to the 1787 *Critique* (Bvii-Bxv).

⁸⁴ Here *a priori* does not presuppose knowledge and thereby implies truth; otherwise the actuality thesis of science would be redundant. Rather, *a priori* is a constraint imposed on conditionals: if some proposition *p* is *a priori*, then *p* is necessarily true if it is true at all.

(3) *Some a priori* knowledge exists.

Obviously, the *a priori* knowledge is not derived from experience, then it can be used as a *counterexample* to the *scope claim* that empiricist epistemology contends: (EE) *All* human knowledge is derived from experience. However, the existence of *a priori* knowledge in sciences is squarely consistent with empiricist epistemology. Since the former is undoubtedly true, the latter must be false.

Due to his limited knowledge of Hume, Kant is unaware of the fact that Hume has drawn the distinction between relations of ideas and matters of fact, the one that is usually thought to anticipate his own analytic/synthetic distinction. Neither does Kant know that Hume's philosophy of mathematics rests precisely on this distinction, which enables him to cope with the challenge on the empiricism's infamous inability to explain mathematics. As Hume writes in *An Enquiry concerning Human Understanding*:

ALL the objects of human reason or enquiry may naturally be divided into two kinds, to wit, *Relations of Ideas* and *Matters of Fact*. Of the first kind are the sciences of Geometry, Algebra, and Arithmetic... discoverable by the mere operation of thought, without dependence on what is any where existent in the universe... Matters of fact, which are the second objects of human reason, are not ascertained in the same manner; nor is our evidence of their truth, however great, of a like nature with the foregoing. (1999, 108)

Hume has at his disposal the resources to develop a qualified empiricist epistemology of which Kant would have the slightest idea in mind. It is widely held that the Humean distinction between relations of ideas and matters of fact coincides with the semantic analytic/synthetic distinction, the epistemological *a priori/a posteriori* distinction, and necessary/contingent metaphysical distinction. Therefore, qualified moderate empiricist epistemology (MEE) could be easily reformulated in Kant's terminology as follows:

- (1) All human knowledge is either synthetic or analytic.
- (2) All synthetic knowledge is empirical, i.e. known *a posteriori*.
- (3) All *a priori* knowledge is analytic.

Fortunately, this much more plausible version of empiricist epistemology does not worry Kant. In Introduction I and II in 1787 *Critique*, Kant takes himself to have successfully refuted the empiricist epistemology by appealing to the apriority of mathematics. Introduction V is intended to criticize the rationalist explanation of mathematics upheld by the “analysts of human reason” (B14). Under the influence of Leibniz, German rationalists are also convinced that mathematics is *analytic a priori*, so Introduction V can be seen as a response to moderate empiricist epistemology. After drawing the analytic/synthetic distinction in Introduction IV, in Introduction V Kant contends that mathematics is not only *a priori* but also *synthetic*. The basic idea of Kant’s objections to the *analytic explanation* of the apriority of mathematics is that the analytic understanding of mathematics arises partly from the misidentification of the necessary condition as the explanatory ground, and partly from the confusion axiom and theorem in mathematics. By ascribing synthetic character to mathematics, the argument against radical empiricist epistemology by appeal to mathematics now could be turned against moderate empiricist epistemology. Now the counterexample to moderate empiricist epistemology is instead:

(3*) *Some synthetic a priori knowledge exists.*

Since the apriority of mathematics is the consensus between the two parties, the only room left for empiricists is to argue that mathematics is not synthetic. Thus, the debate comes down to whether mathematics is synthetic or analytic. If mathematics is synthetic, then moderate empiricist epistemology perishes; if it is analytic, then moderate empiricist epistemology survives. For my present purpose, I will not delve into the controversy. As the passage indicates, one thing for sure is that Kant obviously takes the actuality of synthetic *a priori* proposition as a non-negotiable fact, a phenomenon for which different paths are obliged to offer explanation, and a mystery to which different paths attempt to make response.

Furthermore, there exists nonetheless a much deeper *methodological difference* between Hume and Kant. Since the distinction between relations of ideas and matters of fact is exhaustive, it commits Hume to the radical view that empiricist epistemology is exhaustive in explaining human knowledge. In his *Enquiry*, Hume famously writes:

If we take in our hand any volume; of divinity or school metaphysics, for instance; let us ask, *Does it contain any abstract reasoning concerning quantity or number?* No. *Does it contain any experimental reasoning concerning matter of fact and existence?* No. Commit it then to the flames: For it can contain nothing but sophistry and illusion. (1999, 211)

Obviously, the “abstract reasoning” is concerned with the relations of ideas, i.e. analytic truth, and the “experimental reasoning” with the matter of fact, i.e. synthetic truth. In claiming that all human knowledge takes either synthetic form or analytic form, the disjunction at issue is an *exclusive* one. This exclusive disjunction thesis in moderate empiricist epistemology entails an Exhaustiveness Thesis:

(ET) Moderate empiricist epistemology *exhausts* all human knowledge.

The clear-cut dichotomy of knowledge about the world and the trivial knowledge about judgment or language *exhausts* all intellectually respectable knowledge. Therefore, one important consequence of moderate empiricist epistemology is that there is no other genuine knowledge than that falling under these two categories. In effect, Hume gives a prescriptive claim that sets a criterion to distinguish knowledge from non-knowledge: everything that cannot be derived from experience or conceptual analysis does not count as knowledge. With this sharp distinction in hand, Hume conducts his skeptical project against metaphysics and theology. The stands or falls of the skeptical project depend on the truth or falsity of Hume’s fork.

By contrast, Kant insists that we have a body of knowledge in science *in the first place*. Then, the conflict between Hume and Kant comes down to the two entirely incompatible approaches to epistemology: Hume is a methodist in epistemology, whereas Kant is a particularist in epistemology. Hume begins with a general criterion of knowledge, while Kant starts with some instances of knowledge. In what follows I will give a brief introduction to the methodism and particularism.

In a series of works, Roderick Chisholm articulates the problem of the criterion in epistemology, which bears upon dogmatism and skepticism.⁸⁵ The problem of criteria arises from the following dilemma in epistemology. As Chisholm argues, (i) we cannot know whether some belief B is true unless we know the criterion that can distinguish the true belief from the false one. (ii) We cannot know, however, whether the criterion in question succeeds unless we can tell

⁸⁵ For an elaborate discussion see Chisholm 1982, 61-75. For a concise introduction see Chisholm 1989, 6-7.

whether the criterion yields right results; but (iii) we can do (ii) only if we have already known which beliefs are true and which beliefs are false. Whenever one seeks to figure out the criterion of knowledge, he finds himself caught in a vicious circle. Furthermore, it can be equivalently formulated as the exact same thing happens whenever one seeks to pick out the cases of knowledge.

Chisholm further reformulates the problem of criteria by two most fundamental epistemological questions: (A) What do we know? Or, what is the *extent* of our knowledge? (B) How are we to decide *whether* we know? Or, what are the criteria of knowledge? Chisholm maintains that one cannot answer either question without begging the question. If it is conceded that one must answer either question in a question-begging way, then two strategies are available. If we know the answer to (A), then we know the answer to (B). Alternatively, if we know the answer to (B), we know the answer to (A). As it has been seen above, one must be caught in the vicious circle as soon as he attempts to answer either question. The former is dubbed as particularism, whereas the latter as methodism (or generalism). Chisholm draws the distinction between particularism and methodism. Particularists hold that one has already known the answer to (A), and then one can use (A) to figure out the answer to (B). On the other hand, methodists maintain that one has known the answer to (B), and then he can use (B) to figure out the answer to (A). A kind of skepticism arises from the above dilemma by refusing to answer either question in a non-question-begging way. The skeptics believe that one cannot answer (A) without answering (B), and equally one cannot answer (B) without answering (A), and thus any attempt to figure out the answer to either question is doomed to be bogged in the vicious circularity. For Chisholm, Locke and Hume are methodists, while Thomas Reid and G. E. Moore are particularists.⁸⁶ Chisholm sides himself with the camp of particularism.

Humean empiricist epistemology is committed to a methodist epistemology, according to which we can determine the extent of knowledge by the criterion of knowledge. Put somehow differently, the methodist epistemology says that we can determine *the scope of knowledge* by determining *the source of knowledge*. While empiricist epistemology launches a bitter campaign against pretentious rationalist epistemology, empiricism unites with rationalism on an underlying level by sharing the same methodist epistemological approach. In a more moderate form, empiricism

⁸⁶ Alternatively, Sosa (1980) holds that Descartes as well as Hume are paradigmatic methodists. In fact, the images of these great philosophers are more complex. As a generalist, Descartes has the particularist bent for the knowledge that I exist seems to be an instance of knowledge. The empiricists should have a less confidence on their criterion for the criterion is somehow established by induction. Strikingly, Kant provides a non-epistemic account of the progress of science to establish the criterion of knowledge.

articulates the characteristic empiricist scheme as follows: for any proposition p , p is an instance of knowledge if it is derived from experience (or from conceptual analysis).

Basically, empiricists believe that all ideas are derived from experience, which in turn are furnished by sensory organs. Furthermore, sensory organs are the only reliable faculty apt to produce knowledge or building blocks of knowledge. Therefore, the empiricist epistemology is *preceded* by formulating some criterion of knowledge and correspondently by postulating some faculties of mind. Humean empiricist epistemology commits itself to a scheme in determining knowledge: for any p , p is an instance of knowledge if it meets some criterion of knowledge and matched by appropriate epistemic faculty.

Kant's argument by the actuality of science is not merely directed against empiricist epistemology in particular, it also represents a fundamental break with the previous modern epistemology. In a more underlying level, Kant's affirms the actuality of synthetic *a priori* knowledge before epistemically justifying them.

2.4 The Argument from Experience

Now I turn to Kant's argument from experience. This second argument is equally important yet less known. In the Introduction II in 1787 *Critique*, Kant famously writes, "[e]xperience teaches us, to be sure, that something is constituted thus and so, but not that it could not be otherwise" (B3). According to the empiricist epistemology, however, experience *cannot teach* us that something "cannot be otherwise". To be sure, we can infer possibility from actuality. As Kant makes clear, this kind of purely logical modality is not his chief concern. (A222) What is to Kant's concern is whether *things are necessarily so*; for instance, we do not know whether there are unactualized possibilities. Since empiricist epistemology does not provide us the knowledge of the necessity of things, thus it is characteristic of *modal poverty*.

In the next paragraph Kant writes:

Even without requiring such examples for the proof of the reality of pure *a priori* principles in our cognition, one could establish their indispensability for the possibility of experience itself, thus establish it *a priori*. For where would experience itself get its certainty if all rules in accordance with which it proceeds were themselves in turn always empirical, thus contingent? (B5)

As this passage indicates, experience itself is *not the example* of synthetic *a priori* principles, therefore I separate the argument from experience from the argument from sciences. However, *a priori* principles are instantiated in experience. These *a priori* principles indispensable for experience are referred back to the synthetic principles discussed in the above: “if one would have one from the commonest use of the understanding, the proposition that every alteration must have a cause will do; indeed in the latter the very concept of a cause so obviously contains the concept of a necessity of connection with an effect and a strict universality of rule[.]” (B4-B5) Since the proposition that every alteration must have a cause is integral to and instantiated in experience, experience contains the concept of cause and thereby the modal concept of the necessity of the connection with effect.

Now the tension is felt in Kant’s expression that “the concepts that are present in experience contain a necessity (cause) that experience cannot teach”. Now we have the following two claims concerning experience at issue:

- (1) Experience does contain necessity.
- (2) Experience cannot teach us necessity.

Now we simultaneously have two claims concerning the relationship between experience and necessity, and one is affirmative, while the other is negative. The apparent tension between two claims often tempts commentators to think that Kant’s two claims are incompatible. The solution to this incompatibility is to suggest that Kant’s notion of experience is ambiguous; Kant systematically equivocates between a strong and a weak meaning of experience. The strong notion of experience is the connected perceptions in accordance with the general laws of nature, whereas the weak notion of experience is no more than episodes of sensations.⁸⁷

On my reading, however, this view is incorrect. It is important to see that these two claims are not immediately incompatible with each other. The former is a metaphysical claim that (1) *there exists necessity in experience*. In contrast, the latter is an epistemological claim that (2) *we cannot know necessity from experience*.

Rather, I suggest that Kant has a unified notion of experience, and this notion is fundamentally metaphysical. The appearance of the tension between (1) and (2) arises from the

⁸⁷ See Beck 1978, 40, and Guyer 1987, 80-81.

fact that Kant has a metaphysical use of experience and an epistemological use of experience. That is, this single notion of experience sometimes occurs in an extensional context to yield the claim that (EC) *it is the case* that O is necessary, whereas it sometimes occurs in an intensional context to yield the sentence that (IC) *it is unknowable* that O is necessary. To be sure, Kant is not always careful on this point, but it is clear that he does note that there is a subtle difference in the uses of experience than empiricists themselves do.

Kant's definition of experience is expounded in as follows:

“[*Experience*] is nothing other than the synthetic unity of the appearances in accordance with concepts.” (A108)

“[*Experience*] is therefore a synthesis of perceptions, which is not itself contained in perception but contains the synthetic unity of the manifold of perception in one consciousness[.]” (B218)

This is what I call the metaphysical notion of experience, where experience is constitutionally defined as the synthetic unity of empirical perceptions. In epistemological context, experience is typically regarded as *epistemic source or means*. Typically, it is often used as a verb, or as an object of prepositions; for instance, “from experience” is to indicate the epistemic source, or “by means of experience” or “through experience” is to indicate epistemic means. Take the following text for instance: “[n]ow cognition of objects can be generated from perceptions, either through a mere play of imagination or *by means of experience*.” (A376)

Interestingly, there are texts in which both uses of experience make appearance. For instance, Kant writes: “the empirical laws can only obtain and be *found by means of experience*, and indeed in accord with its original laws, in accordance with which *experience itself* first becomes possible”. In this passage, “by means of experience” clearly indicates an epistemological use, whereas the following “experience itself” is used as a metaphysical use.

I suggest that in the metaphysical context experience is *experience per se*, whereas in the epistemological context experience is *experience relative to empiricist epistemology*, where it is used as *the empirical method* or *the means of experience as means*. Therefore, the seemingly paradoxical expression “experience contains a necessity (cause) that experience cannot teach” strikes us at the first glance now can be relieved as perfectly compatible.

As I have noted, the claim (1) experience contains necessity and the claim (2) experience cannot teach necessity are *not incompatible*. One can hold (1) and (2) at the same time without any incoherence being involved. Despite their compatibility, the difference between the two claims does suggest an *epistemic gap* between them. The metaphysical claim (1) indicates that there is necessary truth in the world, whereas the epistemological claim (2) says that we do not know such truth. The scope of knowledge allowed by empiricist epistemology cannot exhaust the scope of truth.

When Kant claims that there exists necessity in experience, he is obviously not suggesting that this claim is beyond our knowledge. Rather, he is making a claim to knowledge; we do know that there exists necessity in experience. If Kant as well as empiricists is ascribed to the Semantic Antirealism Thesis that all truths are knowable truths, then there is a cheap equivalence between truth and knowledge; one does not only infer from knowledge to truth, one is also allowed to infer from truth to knowledge. Combined with Semantic Antirealism Thesis that (3) truth entails knowledge, it follows from the metaphysical claim that experience contains necessity the epistemological claim that

(4) *Some* knowledge of natural necessity exists.

Remember that:

(2) Experience does not teach us the knowledge of necessity.

Taken (2) and (4) together, it suggests that empiricist epistemology is *incomplete*. However, empiricist epistemology does not merely commit to (2), it also lays claim to the exhaustiveness thesis:

(5) All human knowledge (or truths) is exhausted by empiricist epistemology.

Remember that in the argument from sciences how mathematics refutes empiricist epistemology. By the same token, the epistemological claim on necessity in experience refutes the Exhaustiveness Thesis and thereby the empiricist epistemology.

Now we could put together three following claims:

- (1) Experience contains necessity.
- (2) Experience cannot teach necessity.
- (3) All human knowledge is exhausted by empiricist epistemology.

These three claims constitute an *inconsistent triad*. Both empiricists and Kant are bound to reject at least one of them. In the previous argument, Kant accepts (1) and (2) but rejects (3). Since it is an inconsistent triad, empiricists are left room to reply to Kant's argument by avoiding their commitment to some claim. In fact, empiricists accept (2) and (3) but reject (1). This move is as reasonable as it is unavoidable. Indeed, almost virtually all philosophers arrive at the consensus on the fundamental limitation of the induction of (2) that the epistemic reach of induction cannot be extended to necessity or absolute universality.⁸⁸ Empiricists are no exception. Empiricist epistemology in (3) is distinctive of empiricists.

Adherents of empiricist epistemology might reply that the knowledge of necessity is controversial. Empiricists could argue that there is no necessary truth in the world as claimed by Kant, for the truths that cannot be exhausted by empiricist epistemology simply do not exist. Empiricist epistemology is a powerful weapon against all kinds of metaphysical illusions. To appeal to *controversial* metaphysical claims to revise empiricist epistemology simply misses the point. Again, we fall back to the same situation that we are confronted with as that in the previous argument from mathematics. The dispute between two parties is one regarding what premise is acceptable, and it comes down to the conflict between methodism and particularism.

It is almost a truism that experience cannot teach us the necessary truth. Kant fully appreciates how the modal poverty thesis exerts a devastating consequence when it is taken in conjunction with the empiricist epistemology. The empiricist epistemology cannot provide us with the

⁸⁸ The necessity and the absolute universality are taken by Kant as the two marks of a priori propositions, and therefore they are co-extensive. (B3-B4) Note that the necessity in question should not be understood in terms of possible world. For more details on the relationship between the a priori and its two marks see Casullo 2003.

knowledge that is unconditionally true. It holds independently what the world is like. Thus, one of Kant's deepest worry is that experience cannot teach us the necessary truth *even if the experience in fact contains necessary truths*. The fault of the empiricist epistemology is not that it happens to be false, but it always leaves out modal truths, and thereby it precludes the possibility of expressing the necessary truth. Hence, the empiricist epistemology is not a mirror of reality; rather, it is a barrier for modality.

2.5 The Modal Indeterminacy, Occult Quality, and Explanatory Rationalism

We cannot empirically perceive the necessary connection between events; nor are we endowed with a special faculty capable of insight into such a necessary connection. In conjunction with the Semantic Antirealism Thesis, from the epistemic claim that we do not have knowledge of necessity it follows that:

(4) There is no necessity in experience.

In rejecting that there is any necessity in experience, one might be tempted to infer from the empiricist epistemology to a preeminent metaphysics, i.e., the *Humean metaphysics*. The Humean metaphysics is inspired by Hume, but it does not imply that it is embraced by Hume. According to Humean metaphysics, there is no necessary connection in the world. The world is a mosaic figured by spatiotemporally distributed particulars, and there is nothing over and above the local particulars in space and time. Laws of nature are nothing but constant regularity, and the causation is nothing but the constant conjunction. As Hume nicely captures in the §58 of the *Enquiry*: "All events seem entirely loose and separate. One event follows another; but we never can observe any tie between them. They seem *conjoined*, but never *connected*."⁸⁹

In spite of the temptation, the reasoning from empiricist epistemology to Humean Mosaic is fallacious. In the intensional context of knowledge, we cannot infer from *the denial of the knowledge of existence* to *the knowledge of the denial of existence*. If the empiricist epistemology is driven consistently to its logical conclusion, what we have is not the *contingency* in the world, but the *modal indeterminacy* in the world. That is, neither can one derive necessity from experience, nor can one derive contingency. In Kant's terminology, empiricist epistemology would say that neither experience can

⁸⁹ Hume 1999, 144.

teach us that it *could not be otherwise*, nor can it teach us that it *could be otherwise*. Consequently, the world is *crude-grained in modality* as long as one is committed to empiricist epistemology. We only know that it is so, and we do not know whether it is so necessarily or contingently. We cannot have a finer-grained picture of the world where its modal structure is specified.

Kant is far from satisfied with modal indeterminacy. The Transcendental Deduction shows that the world is not modally indeterminate. Rather, the world is modally fine-grained, and it is much fine-grained than one might think. The way we gain insight into the modal structure of the world is by acknowledging the existence of certain modal knowledge and by assuming a particularist epistemology in the first place.⁹⁰

One important consequence of the modal indeterminacy of empiricist epistemology is that it deprives us of why-knowledge and leaves us only that-knowledge. For Kant, the why-knowledge is the knowledge of ground.⁹¹ According to the empiricist epistemology, we do not have the knowledge that *it cannot be otherwise*, which is equivalent to the knowledge of that *it must be so*. On the rationalist paradigm, something is necessarily so because it is a consequence necessitated by its ground. Therefore, we are deprived of the *knowledge of something as a consequence of a ground*. Since the notion of ground and that of consequence are inter-definable, this means that we do not have *knowledge of the ground*. The knowledge of ground is nothing but an explanation, so no genuine explanation could be given. Since both the notion of cause and that of law presuppose the notion of necessity and ground, we can give neither causal explanation nor nomic explanation. What empiricist epistemology ends up with is not even some explanatory gap, but an utterly *explanatory void*.⁹²

At this moment, it is not difficult to see that the Humean metaphysics collapses into a species of the system of occult quality, represented by common sense theorists. It has now become more widely accepted that, in spite of their focal difference, Hume and Reid bear a striking resemblance in their upholding both naturalism and skepticism.⁹³ Here we find that Hume and common sense theorists converge also on another issue: both of them are committed to the assumption of explanatory anti-rationalism that everything is simply the case without further explanation.⁹⁴ This

⁹⁰ For more details on modal indeterminacy see 6.5.

⁹¹ See Stang 2016, 128.

⁹² Nevertheless, many contemporary philosophers believe that even facing this seemingly fatal modal objection the empiricism could be saved. In my view, since Kant has a very specific and even narrow conception of the empiricist epistemology, which is characterized by perception, reflection and induction, he would take the contemporary attempts as beyond the limit of the framework of empiricism.

⁹³ See Van Cleve 2015, 301-318.

⁹⁴ Like most of his contemporaries, Kant is convinced that Reid and Hume are profoundly opposite to each other, and he famously sides with Hume in his introduction to 1783 *Prolegomena*. Kant's evaluation of Hume's attack on the connection of cause and effect is followed by his comments on Hume's common sense opponents: "But fate, ever

is precisely the antithesis to one of Kant's most underlying assumptions. According to Kant's explanatory rationalism, everything must be explained. Explanatory rationalism as a methodological thesis implies ontological rationalism that everything contingent must be a ground.

Here we could further distinguish two versions of explanatory anti-rationalism. One version of explanatory anti-rationalism is *ontological*, and it is embraced by common sense theorists. Ontological anti-rationalism claims that the world is all that seems to be the way it is such that we *need not* explain it. The other version is *epistemological*, and it is embraced by Hume. Epistemological anti-rationalism claims that the world is all that seems to be the way it is such that we *cannot* explain it. The latter epistemological version is subtler, since it first philosophically reflects on our epistemic capacity, and then claims that we are *not epistemically entitled* to search the ground of the way the world is.

The system of occult quality also commits Hume to be inconsistent with Locke. On Kant's interpretation, the representative of empirical path Locke is an advocate of physical influx, the view that causation is explicable in terms of *transferring influence* from one object to the other. Therefore, Locke is endorsing the causal realism. However, when the empirical path is pushed to its logical consequence, causation in general is viewed simply as a metaphysical illusion. Hence, Humean metaphysics is incompatible with any kind of positive theory of causation, and it is incompatible with physical influx theory of causation, to which Locke is committed.

ill-disposed toward metaphysics, would have it that Hume was understood by no one. One cannot, without feeling a certain pain, behold how utterly and completely his opponents, *Reid, Oswald, Beattie*, and finally *Priestley*, missed the point of his problem, and misjudged his hints for improvement – constantly taking for granted just what he doubted, and, conversely, proving with vehemence and, more often than not, with great insolence exactly what it had never entered his mind to doubt – so that everything remained in its old condition, as if nothing had happened.” (AA 4:258)

Chapter 3 Against the Mystical Fanatical Path

3.1 Introduction

Kant refers to the mystical path as “the fanatical path of intuition through the understanding” (AA 18:272). “Intuition through understanding” is nothing but the intellectual intuition by means of which an object is produced. As I have mentioned, this is the reason why this fanatical path could be regarded as caught on the second horn of the original dilemma of the Relation Problem concerning representation and object. The mystical fanatical path is characteristic of (i) enthusiasm, (ii) mysticism, (iii) innatism. Enthusiasm and innatism are common to both fanatical paths, yet only mysticism is peculiar to the mystical system of the fanatical path. I will merely discuss the *enthusiasm* and the *mysticism* of mystical fanatical path in this chapter, and leave Kant’s response to on innatism to the next chapter.

Although “fanatical” and “enthusiastic” does not stem from the same root, I still take them to be *synonymous* since they are used interchangeably by Kant. In Reflection 4452 dated to 1772 Kant writes: “[t]he objects are sensitive; only the use of reason with respect to them takes place in accordance with merely intellectual laws; if the objects are intellectual, then this is a form of enthusiasm.” (AA 17:557) By “enthusiasm” Kant refers to the position that *mistakes sensible objects as intellectual ones*. The use of the label is new,⁹⁵ but the message it conveys is familiar to us: it is nothing other than the famous charge that Leibniz “intellectualized the sensible world” (A271/B327).

Mysticism is characteristic of advocating that our cognition are means (i) ineffable or incommunicable or (ii) unanalyzable, and historically mysticism is closely associated with one or another sort of intuition. On the one hand, mysticism is the rational insight of “mind’s eye”. On the other hand, it dismisses the expressiveness of our conceptual apparatus. In short, the mystical fanatical path commits enthusiasm in that the sensible objects are mistaken as the intellectual ones, and it commits mysticism in that it confers a special intuition to the human mind. As we shall see, Kant rests his objections to enthusiasm and to mysticism respectively upon two distinctions fundamental to his philosophy: the former one is the sensibility/understanding distinction, and the latter one is the intuition/concept distinction. Whereas Kant vehemently attacks empiricism for its

⁹⁵ In *Critique*, “enthusiasm” is used in contrast to “skepticism” and it is applied to Locke (B128). Therefore, it seems that Kant here introduces a new use of enthusiasm which is somewhat different from that in the *Critique*. Due the stereotype of the empiricism/rationalism opposition, one even might raise the doubt whether Kant’s use of enthusiasm is consistent. However, it is not difficult to see that the use in Reflection is compatible with that in *Critique* and that the former could be regarded as a species of the latter, since the latter is defined in a general sense of not being “kept within limits by indeterminate recommendations of moderation” (B128).

explanatory inadequacy, he still sees empiricists as allies in that they could reach consensus on what an acceptable philosophical explanation should be. The fanatical path, however, falls prey to the far more serious defect of *explanatory illegitimacy*.⁹⁶

In the case of the mystical fanatical path, Plato and Malebranche are regarded by Kant as the representatives. In the case of the empirical path, Aristotle and Locke are analogously regarded as the representatives. Although Kant says little on Aristotle, his texts on the two moderns Locke and Hume are abundant. That is why in the previous chapter I discuss Locke and Hume rather than Aristotle. In this chapter, however, it might be a surprise to many that the target will be directed not to the modern philosopher Malebranche, but to the ancient philosopher Plato. In fact, Kant's early texts on Malebranche as well as on Plato are scanty and meager, but this situation does not last after the publication of the 1787 *Critique*. Kant's increasing critical engagement with Plato extends from the 1780s well into the 1790s. In addition to the *Critique*, it is also recorded in his account of the history of philosophy presented in the transcripts of his lectures on logic and on metaphysics, for instance, in *Dohna-Wundlacken Logic* (1792), in *Metaphysik Mrongovius* (1782/1783) and in *Metaphysik Vigilantius* (1794-1795).⁹⁷ In particular, Kant's view on Plato is most systematically and intensively presented first in Reflection 6080 titled *On Philosophical Enthusiasm* dated to the 1780s (AA 18:434-437) and then in his polemical essay *On a Recently Prominent Tone of Superiority in Philosophy* (AA: 8:389-406)⁹⁸. In a number of texts on the enthusiasm, it is Plato rather than Malebranche who always resides at the center of discussion. Furthermore, Kant reconstructs a three-stage development of the enthusiasm of which Plato is not only the very origin but also the most philosophical.⁹⁹

Kant's preoccupation of Plato is not drawn out of the air; rather, it is the symptom of the philosophical interest of the time. In the late eighteenth century, Germany witnessed a revival in the interest in Plato. Serious studies as well as new translations and editions of Plato's work emerged. From the 1770s onward the wave had already begun to be felt, and by the 1790s the Plato renaissance was well established and it even influenced the ongoing philosophical debate.¹⁰⁰

Not all the consequences of the Platonic renaissance were welcoming, however. With the growing interests in Plato, many laymen were attracted by the exoteric aspects of Platonism. These

⁹⁶ For a version of account of mysticism and Kant's ally with empiricism and rationalism against it see Henrich 2008, 65-81.

⁹⁷ I follow the titles given in the Cambridge Edition, and I will keep the German titles for the untranslated lectures in the Cambridge Edition.

⁹⁸ Abbreviated as *Tone* thereafter.

⁹⁹ For Kant's own account of a three-stage development of enthusiasm see R6051 (AA 18:438).

¹⁰⁰ See Wundt 1941 and Beiser 2009, 364-365.

Platonic enthusiasts even assured themselves that they uncovered a genuine philosophical insight or method superior to all other philosophies. This insight or method is resistant to conceptual analysis and discursive thought. In fact, Kant's 1796 essay *Tone* is a product of his reaction to the Plato renaissance in Germany in general and the exoteric aspect of Platonism in particular. In spite of its polemical character, it reveals more explicitly than any other Kant's texts the tension between the two images of Plato Kant has in mind: one is *Plato the letter writer*, whilst the other is *Plato the academy*. Therefore, it is in this very text that we are in a position to be liberated from the one-sided negative impression of Plato in the *Critique* and to be offered a chance to appreciate a more complex image of Plato in Kant.

The problem in the case of the empirical path is that the studies of empiricists are too many, whereas the problem in the case of the mystical fanatical path is that the studies of Plato are too few. While Plato and his system are briefly discussed in the Herz letter, it hardly changes the fact that the second literature on Kant's project of transcendental deduction lacks the serious interest in the independent study of Plato. On the one hand, it is due to the reason that Kant does not mention Plato in the first half of the *Critique* at all, and Kant's post-*Critique* works are not given its due. On the other hand, it is due to the reason that by Copernican Revolution Kant's transcendental path replaces Plato's mystical fanatical path as the representative of the grounding model that "the representation makes the object possible". As I will show in Chapter 5, while both paths are committed to the grounding model that "the representation makes the object possible", they represent the *only* two possible ways of grounding object in representation: to make object possible in virtue of making it *actual*, and to make the object possible by making it *determinate*. Given Kant's famous distinction between existence and property, it is by no means a negligible difference.

In section 3.2, I will first reconstruct the Platonic epistemology and its metaphysics. Interestingly, Kant attributes to Plato an argument from geometry that bears a striking similarity to his own. In section 3.3, by examining Plato's argument from mathematics, we are revealed that Plato is heading in a wrong direction by erroneously assuming that apriority entails intellectuality. And then I will argue that, contrary to what many would expect, Kant does provide arguments for the seemingly brute fact that intellectual intuition is not human. In the ensuing section 3.4, I will investigate into Kant's remedy of introducing mystical intuition, and I will suggest that this complementary argument is not only insufficient, but also incompatible with Kant's fundamental assumption of causal realism.

3.2 The Platonic Epistemology and Metaphysics

One presumably worry of Kant's approach to Plato is how much the respective philosophical concerns of the two philosophers could converge, and to what extent their vocabularies are commensurable. Initially, this worry might appear superfluous. Our original motivation to approach to Plato is that this great representative of mystical fanatical path occupies a distinctive place in Kant's spectrum of philosophical systems. Nonetheless, a further problem still remains whether Kant offers any formulation of Plato's specific argument in addition to a mere location of the latter's position in the philosophical spectrum.

As I have noted, however, the objective reality problem is not the only way Kant articulates his central metaphysical concern. If I would like to follow my strategy in approaching the empirical path by initiating with examining *the scope of knowledge*, the commensurability question becomes pressing. At least it appears more difficult to formulate the ancient philosopher Plato's doctrine than those of the moderns (say, Locke or Crusius) in Kantian terms. In the 1787 *Critique* Kant even claims that the analytic-synthetic distinction or the like is unavailable to Plato, and the problem of synthetic *a priori* propositions never occurs to him as to other ancient philosophers. (A10f)

Fortunately, this difficulty is alleviated by Kant himself. Kant not only *defines* Plato's position but also presents his reformulations of Plato's arguments with reference to both questions. In *On Philosophical Enthusiasm* Kant reformulates Plato's argument in terms of the problem of objective reality. In *Tone*, by contrast, Kant reconstructs Plato's argument in terms of the problem of synthetic apriority. Thus, Kant's own philosophy and Plato's philosophy share the commensurability in substance.

In *Tone* (1796), Kant construes Plato's philosophy as a distinctive endeavor aiming at resolving the mystery of metaphysics. It should be kept in mind that for Kant how general and how systematic the mystery of synthetic *a priori* propositions is. The problem of synthetic *a priori* propositions is not only *the puzzle for Kant alone*. Neither is it merely *a problem for modern philosophy*. One is tempted to think so if he notices that it presupposes a doctrine of ideas or representations, which is flourishing precisely in modern philosophy. Rather, it is *the riddle of metaphysics in general*. All systems of metaphysics in history could be understood as a series of attempts in approaching and tackling this question in different disguised forms.

Before we delve Plato's epistemology, two caveats are worth making. While Platonism is a general and complex position, what Kant bears in mind is *Mathematical Platonism* and *Christianized*

Platonism. First, Kant's reformulation of Platonism is concentrated on his *philosophy of geometry*.¹⁰¹ It is well known that the concern of transcendental deduction is not the philosophy of mathematics, but metaphysics.¹⁰² One might naturally wonder whether the attempt of explaining geometry should be a proper part of transcendental deduction. It must be conceded that in the strict sense such a study does go beyond the task of the deduction of *categories*. In any case, however, it is not redundant. The formulations of and solutions to general Relation Problem bring into focus the various possible *grounding relations* between representation and object yet, to some extent, distract itself from *the kinds* of representation. In this light, the exploration of one distinctive kind of grounding relation of representation to object is not only beneficial but also obligatory.

Second, when Kant refers to the doctrine of Plato, he is not referring Platonism *per se*, but to *Christianized* Platonism. The chief difference between Platonism *per se* and Christianized Platonism lies in the metaphysical status of the Platonic Ideas. According to Plato, all Ideas as abstract objects are immutable, eternal, and uncreated. In spite of their *subordination* to the Idea of Good, in any case all the Ideas other than this most sublime one *not created by* it. According to Christianity, God is the creator of all beings and the source of all truths, and only God is immutable, eternal, and uncreated. Therefore, the uncreated nature of Platonic Ideas and the uncreated and even omnipotent nature of Christian God forms a tension. The Christianized Platonism relieves the tension by arguing that all Platonic Ideas are not only the archetypes of the sensible particulars but also *the divine Ideas* of God. The Ideas are created by God, and they can be destroyed by God as well. They are still immutable, eternal, and uncreated in the sense that they are not created or changed for any reason by anything in addition to God.

According to Kant, the mystical fanatical path represented by Plato is committed to the following epistemology:

(MRE1) Empirical knowledge is derived from experience.

(MRE2) Synthetic *a priori* knowledge is acquired by intellectual intuition. (Dilemma)

¹⁰¹ In *Critique*, mathematics is divided into geometry and arithmetic. The philosophy of these two branches of mathematics have their different respective historical predecessors. Plato is the first philosopher who attempts to resolve the "wonders of shapes" in geometry, whereas Pythagoras is the first philosopher who attempts to resolve the "wonder of numbers" in arithmetic. In practice Kant's emphasis is more attached to geometry than to arithmetic, and, as a matter of fact, Kant's discussion of Plato is far more informative, I will concentrate myself on Plato's endeavor in explaining geometry.

¹⁰² For Kant there is a subtle yet qualitative difference between the study of the nature of space and that of magnitude.

It is not difficult to see that, on Kant's interpretation, Plato is in effect adherent to a *qualified empiricism*. In explaining empirical knowledge, Plato claims that empirical knowledge is derived from experience as well. On the basis of the confinement of empiricism, Plato makes great progress beyond the confinement of empiricism. Compared to Locke, Plato is correct in identifying the actuality of *a priori* knowledge. Compared to Hume, Plato is correct in identifying the *a priori* knowledge is *synthetic* and thereby tracking *the source of a priori knowledge* to intuition rather than to concept. Therefore, Plato does not suffer from *the poverty objection to scope*. However, Plato leaves open to *the mistake objection with respect to source*. In the case of the empirical path, Kant's mistake objection with respect to the epistemic source is targeted toward *the faculty of sensibility*. When it comes to the mystical fanatical path, as we will see, his mistake objection with respect the source of knowledge is mostly directed to *the faculty of understanding*, and he further identifies that the misconception of sensibility is a result of the misconception of understanding.

As we will see, while Plato's argument from the synthetic *a priori* propositions starts with the epistemological premise, it is an argument toward the *explanatory grounds* of some set of knowledge. If Kant's interpretation of Plato's argument is explanatory in character, it could be viewed as pursuing the sufficient conditions of synthetic *a priori* propositions. However, the interpreted argument is also an analysis of the necessary conditions of these synthetic *a priori* propositions. The evaluation of Kant's reconstruction must be made from both aspects.

On Kant's interpretation, Plato's argument from the synthetic *a priori* propositions is very complex. For the expository purpose, I understand this argument as two-staged in structure: at the first stage, Kant proposes a naïve argument, however, it soon turns out that this naïve argument is unsound; in at the second stage, based on the native one, Kant develops a more sophisticated argument in the hope of remedying the deficiency of the naïve argument, which falls prey to other serious objections. In the following, I will in turn discuss these two sub-arguments.

3.3 Against the Naïve Argument for Intellection Intuition

3.3.1 From the *A Priori* to the Intellectual

According to my reconstruction drawing on *Tone* as the primary material, the following argument is attributed to Plato:

- (1) Synthetic *a priori* propositions (e.g. mathematics) are actual.
- (2) Synthetic *a priori* propositions (e.g. mathematics) requires *a priori* intuition.
- (3) *A priori* intuition is intellectual. (by Coextension Assumption)

Steps from (1) to (3) constitutes what I call the naïve argument. In order to explain the mystery of synthetic *a priori* propositions, the naïve argument shows how intellectual intuition is introduced. In the course of argument, Plato is credited by Kant as proceeding “*consistently*”. It does not mean that Plato’s argument is sound; rather, it means that it does not contradict with *his own principle* such that his own position is coherent. If the argument turns out to be unacceptable, it is natural to look at which premise is open to criticism.

Kant’s reconstruction of Plato’s naïve argument is reminiscent of his own argument from geometry first developed in *Prolegomena* and then taken over, in a more concise way, in 1787 *Critique*. First, both arguments start from the premise that synthetic *a priori* propositions exist, which is the consequence of the conjunction between actuality thesis of mathematics and the synthetic apriority thesis of mathematics. Kant attributes both the actuality thesis and the synthetic apriority thesis of mathematics to Plato:

- (1.1) Mathematics is actual.
- (1.2) Mathematics is synthetic *a priori*.
- (1.3) Synthetic *a priori* propositions are actual.

Plato acknowledges not only that *mathematics exists*, but also that there is something mysterious in mathematics. It is plausible to suppose that the “wonders of shapes” (AA 8:392) that fascinates Plato is nothing but the *a priori* character of mathematics that is closely associated with the perfection in the geometrical figure, which is characteristic of necessity and universality. Distancing from German rationalists, Kant aligns himself with Plato in agreeing that mathematics is *synthetic*. In other words, Kant is not alone in arguing against the dominant view in Germany that mathematics is analytic; rather, he roots himself in a respectable tradition stemming from antiquity.

However, it seems that the syntheticity view of mathematics is inconsistent with the intuitivity view of understanding. The analytic/synthetic distinction is drawn in terms of the positive

characterization of the analytic, which in turn rests on the notion of conceptual analysis.¹⁰³ The conceptual analysis further presupposes that human understanding is discursive, i.e. think by means of concept. Consequently, to attribute to Plato a synthetic view of mathematics is to commit Plato to a discursive model of human understanding. Since Kant maintains that the distinction between intuitiveness and discursivity is mutually exclusive when applied to human understanding, at this point Plato has been forced to preclude the possibility that human understanding can be intuitive, which is precisely the conclusion he would draw.

In response to this worry, one could propose that the meaning of syntheticity could be positively defined without reference to analyticity and discursivity. If some proposition is synthetic, then it means that the truth of the proposition must be determined with *reference to the object*. The truth of the synthetic proposition cannot be determined by the relationship between the content of the subject concept and that of the predicate concept; instead, it must be determined with reference to the third thing that goes beyond the content of the subject and predicate of the proposition. When it comes to geometry, it is very plausible to attribute to Plato the view that geometrical propositions are true of *geometrical objects*.

The similarity between the two arguments is reflected not only in premise but also in structure and strategy. Kant's own argument from geometry is divided into two steps. The first step is to argue that geometry requires *a priori* intuition, and the second step is to *accommodate a priori* intuition in human faculty by identifying it as the forms of sensibility. Similarly, Plato's naïve argument from geometry is also divided into two steps. The first step, by the same token, is to argue that synthetic *a priori* propositions require *a priori* intuition, and the second step is to trace the *a priori* intuition to the faculty of understanding. The underlying strategy is characterized by identifying what kind of representation is required if it is to play the *explanatory role* in accounting for geometry, and then to *individuating this explanatory role*, that is, to show that there exists this kind of representation by locating it in some cognitive faculty.

On Kant's interpretation, Plato takes a splendid first step to victory in (2). Plato is correct in identifying that it is *a priori* intuitions, rather than concepts, that are the key to the solution of the apriority of mathematics, and he is also correct in believing that *a priori* intuition does exist (AA 8:391f). However, Plato is only halfway to fulfilling his promise of explaining the "wonders of shapes". In (3) Plato's argument decisively diverges from Kant's view by tracing *a priori* intuition to understanding, rather than to sensibility.

¹⁰³ See Anderson 2015.

Given the initial striking resemblance, it is natural to ask on what account Plato's explanation of geometry is led astray such that in the final step he draws a quite different conclusion from Kant's own in the *Prolegomena*. It is easy to see that, in order for the inference to go through, Plato should be committed to the following assumption:

(A1) All and only *a priori* knowledge is intellectual.

In fact, Kant does explicitly ascribe this assumption to Plato in R4851: "Plato took all *a priori* cognition to be intellectual. Leibniz too, and thus they did not recognize the sensible in space and time. Leibniz also explains it as intellectual but confused." (AA 18:9) In conjunction with (A1), from (2) it immediately follows that synthetic *a priori* propositions in mathematics are traced back to and explained by the intuition of intellect. Given both the *a priori*/empirical distinction and the sensible/intellectual distinction are mutually exclusive and jointly exhaustive, it is easy to derive that

(A2) All and only sensible knowledge is empirical.

One consequence of the co-extension between the intellectual and the *a priori* is the co-extension between the sensible and the empirical. In effect, this line of reasoning establishes the *Co-extensionality Thesis* that *a priori*/empirical distinction in knowledge is co-extensive with the sensible/intellectual distinction in mind. When he writes that "one distinguished intellectual cognitions from empirical ones and understood the latter when one called them sensible" (AA 18:438), what Kant has in mind is probably that we are used to understanding the empirical knowledge in terms of the sensible knowledge. While (A1) is relatively unfamiliar to the readers, (A2) is the target attacked by Kant repeatedly.

If one turns his objection on the assumption of Co-extensionality Thesis, the objection would be the most knocking-down one. By denying the assumption that makes Plato's inference to go through, it claims that intellectual intuition is *not a necessary condition* for explaining synthetic *a priori* propositions in mathematics. However, Kant does level such an objection. This objection to the co-extensionality assumption presupposes that the truth of his positive views that space and time are forms of sensibility and that they are *a priori*. In effect, denying the assumption does nothing

other than saying that since Kant's argument from geometry is right, then Plato's rival argument is wrong. To make this move will undermine my overall strategy to bring the different possible paths under scrutiny. The strategy of examining other rival paths intends to prove that the transcendental path is correct precisely because other alternatives are incorrect; not the other way around. In the following, I will proceed to examine whether intellectual intuition is a *sufficient* condition for explaining synthetic *a priori* propositions *as if* the Co-extensionality Thesis holds and it has been established that intellectual intuition is a *necessary* condition. As we will see, attacking the assumption of the inference from (2) to (3) is not the only objection Kant can raise to Plato's naïve argument. In fact, Kant will level a series of subsequent criticisms on the idea of intellectual intuition.

Both the *a priori*/empirical distinction with regard to knowledge and the sensible/intellectual distinction with regard to mind are the two indispensable pillars of Kant's edifice of epistemology. However, the question still leaves open as to which distinction is primary in its importance. This is made explicit in the R4851 dated to between 1776 and 1778:

Acquisitae are *a priori* or *a posteriori acquisitae*, the former are not always intellectual. Thus the division of cognition into sensitive and intellectual is not the primary one, rather the division into *a priori* or *a posteriori* cognition. The former is either sensible or intellectual. (AA 18:8)

On Kant's interpretation, the traditional view is that the faculty distinction between sensibility and understanding is primary. However, Kant holds this view is incorrect. Rather, the distinction between the *a priori* and the *a posteriori* should assume primacy. Interestingly, Kant further identifies the Co-extensionality Thesis as the root of the misguided traditional view. Kant argues that not all *a priori* representations are intellectual. Rather, some *a priori* representations are sensible. Kant's suggestion seems to be that if the co-extension between sensible/intellectual distinction and *a priori*/*a posteriori* distinction holds, it leaves unmotivated to and pay attention to and analyze sensibility for identifying *a priori* acquired representation. It is noteworthy that what Kant says is not that the Co-extensionality Thesis *entails* the primacy of the faculty distinction, but that the former *encourages* the latter.

In order to liberate ourselves from this traditional prejudice, the key is to take the distinction between the *a priori* and the *a posteriori* as the primary one in the division of cognition. Therefore, the remedy is to locate and separate the *a priori* elements from human cognition *in the first place*, and then to examine whether they are to be attributed to sensibility or to understanding. Kant is not formulating a *metaphysical thesis* that *a priori* representation is a genus, and sensible and intellectual

representations are its species that flies in the face of the obvious intersection of the twofold distinction. Rather, what Kant formulates is a *methodological thesis* that in practice we should proceed from the *a priori/a posteriori* distinction to sensible/intellectual distinction *as if a priori* representation is a genus, and sensible and intellectual representations are their species.

In any event, Kant's suggestion is not casual; rather, he takes it seriously. This methodology is employed rigorously and built into the architectonic of both editions of *Critique*. As is well known, the *Critique* is characteristic of the scrutiny of human faculties by ascending from sensibility through understanding to reason. This structure remains untouched throughout two editions. Nevertheless, this grand design of the *Critique* does not dwarf the fact that the critique of the three human cognitive faculties is *preceded by* and *grounded in* the more fundamental distinction between the empirical and the *a priori* cognition in both editions of Introduction to the *Critique*, which is the proper starting point of Kant's critical project.

In effect, this objection to the primacy of the faculty distinction between sensibility and intellectual with respect to human cognition is distinctive of Kant's critical philosophy. It constitutes a straightforward response to anyone who suspects that the endeavor of critique of human faculty has started off well before Kant published his *Critique*. For instance, in his unfriendly review of the 1781 *Critique*, Eberhard commented that "the Leibnizian philosophy contains just as much of a critique of reason as the more recent one, whereby it nevertheless introduces a dogmatism grounded in a careful analysis of the cognitive faculties, therefore containing everything that is true in the latter, but still more besides in a grounded extension of the domain of the understanding" (AA 8:187). One of Eberhard's points is that the distinction between sensibility and understanding has already been found in Leibniz and the originality of the *Critique* is thereby distracted.¹⁰⁴

Kant himself is ready to accept the view that the distinction between sensibility and understanding is not novel. He even traces the distinction between sensible and intellectual knowledge back to the philosophy before Plato. In his own latter addition to Reflection 6051 around the 1780s, Kant writes: "Even before Plato one distinguished intellectual cognitions from empirical ones and understood the latter when one called them sensible, and thus certainly made a distinction between intelligible and sensible things. One held all *a priori* cognition to be intellectual, thus even mathematics; and since various sensitive things, and actually only these, can be cognized *a priori*, one had examples of a supposedly intellectual cognition." (AA 18:348) This tradition extends to Leibniz as well: "Plato took all *a priori* cognition to be intellectual. Leibniz too, and thus

¹⁰⁴ For Eberhard's criticisms see the translator's introduction to *On a Discovery* in Cambridge edition of Kant's works.

they did not recognize the sensible in space and time. Leibniz also explains it as intellectual but confused.” (AA 18:9)¹⁰⁵

Therefore, Eberhard levels his criticism on a straw man for he not only misses but also misunderstands precisely one of the most distinctive feature of *Critique*. What is of utmost importance to the critical project of human faculties is not the distinction between sensibility and understanding, but that between apriority and aposteriority. In spite of taking over the faculty distinction, Leibniz takes the faculty distinction to be logical on the one hand, and he does not attach primary importance to the *a priori/a posteriori* distinction on the other hand. Consequently, Leibniz falls under the category of dogmatism characteristic of not being able to critique human faculties in advance and thereby he is no exception to Kant’s ruthless and relentless attack.

Neither is Kant unaware of the superficially similar work done by his contemporaries. Tetens, for instance, published his *Philosophical Search on Human Nature and Its Development* (*Philosophische Versuche über die Menschliche Natur und ihre Entwicklung*) in 1777, one devoted to the study of the nature of human mind.¹⁰⁶ Rather, Kant closely studied Tetens’ work, and it bears the witness that Kant even often leaves the work opened while composing *Critique*. Kant is equally aware of the unmistakable difference between his project and that of Tetens. In Reflection 4901 dated between 1776 and 1778, Kant writes: “**Tetens** investigates the concept of pure reason merely subjectively (human nature), I investigate them objectively. The former analysis is empirical, the latter transcendental.” (AA 18:23) For Kant, one key to distancing his own transcendental study from Tetens’ empirical study lies in Kant the primary distinction in the critical project is assumed by that between the *a priori* and empirical cognition.

3.3.2 Kant’s Objections to the Intellectual Intuition

Kant’s official objection to Plato’s attribution of intuition to intellect is that intellectual intuition is *not human*. Insofar as the explanatory aim is concerned, it amounts to suggesting that Plato’s naïve argument is irrelevant. Although Kant often sounds like that the discursivity of human understanding is a brute fact which does not need to be justified, he nonetheless offers an array of independent arguments for the rejection of intellectual intuition as human. Most of the arguments can be found in R5637 dated probably to early 1780s:

¹⁰⁵ In fact, Kant’s conception of the sensibility/intellect distinction is radically distinct from all of his predecessors. For Kant’s innovative theory of mind see Chapter 9.

¹⁰⁶ For Tetens’ important role in the development of Kant’s critical philosophy see De Vleeschauwer 1962, 68-88. For a comparative study of Tetens and Kant see Allison 2015, 143-163.

Among all of our thoughts there is not the least trace of the intuition of objects other than those of the senses and no thoughts that pertain to anything other than the exposition of appearances. An intellectual intuition of objects outside of us, that do not exist through us, also seems to be impossible.

If one assumes intellectual intuitions, this yields no cognition of the understanding through concepts and thus no thought and also no communicable cognition. (AA 18:274-275)

In the first paragraph of the R5637 Kant offers two arguments for the rejection of intellectual intuition as human: one is *empirical*, and the other is *conceptual*. The empirical reason is that “[a]mong all of our thoughts there is not the least trace of the intuition of objects” other than our concepts of objects. Empirically, there is no slightest sign that our thoughts consist of concepts through which objects cannot be given, though they can be thought. This is Kant’s most famous reason to reject intellectual intuition as human, and it gives people the impression that Kant does not have any argument against intellectual intuition at all.

A more obscure argument is that the notion of “intellectual intuition of objects outside of us” is conceptually self-defeating. Kant seems to suggest that “objects outside us” implies that they “do not exist through us”, i.e. their existence is independent of mind. However, “intellectual intuition” means nothing but the very kind of representation that produces the object, that is, the existence of objects is dependent on mind. If combined together, then the notion of “intellectual intuition of objects outside of us” commits to that objects outside us are dependent on us and independent of us at the same time. For both reasons, the view that our understanding could be intuitive does not have any chance to be correct.

The second paragraph is difficult, for the communicability of cognition is a rare topic in Kant, which involves the relationship between language and mental representation. Apparently, Kant is charging that the introduction of intellectual intuition of eliciting the incommunicability of cognition. The final aim of the argument is also targeted against the *non-humanity* of intellectual intuition. The argument is essentially one by *modus tollens*: if we have intellectual intuition, then we would have no communicable cognition. Since we do have communicable cognition, we do not have intellectual intuition. The crucial premise of the argument is obviously the conditional claim that if we have intellectual intuition, then it invites uncommunicable cognition. I think that Kant’s argument for this conditional claim can be reconstructed as follows:

- (1) Only predicate can be communicable.

- (2) If we have intellectual intuition, then we have no concepts and thus no predicate.
- (3) We do not have communicable cognition.

In the following, I will first sketch an outline of what Kant *would* say in regard to the relationship between mental representation and language, and then suggest a way of reading this passage with reference to the linguistic analogue of representation. The foundation of my reading is to assume that Kant's conviction that our understanding is discursive is the key to the explanation of *the phenomena of publicity of propositional knowledge*.

For (1): Our words and sentences are physical expressions of mental representation. General terms are linguistic expressions of concepts, while singular terms such as demonstratives are expressions of intuitions.¹⁰⁷ Now let's assume that this is Kant's view of the relationship between language and mental representation. Then, the communicability of our representations can be explained with reference to their linguistic analogue. There is a fundamental difference between general terms and demonstratives. General terms are not context-sensitive, whereas demonstrative are. Only by general terms can we express ourselves independently of the presence of the referents.

By the same token, there is a fundamental difference between concepts and intuition. Concepts are the representations that have fixed descriptive content by means of which one can understand other's words without the presence of objects referred to by the concepts. Unlike concepts, intuitions are not associated with the descriptive content. One cannot communicate or even express himself only with the aid of demonstratives like 'this' or 'that'.¹⁰⁸

Only with the aid of the fixed descriptive content in concept can we overcome the limitation of the descriptive emptiness of the demonstrative. Therefore, the communicability of our cognition draws on the generality of our concept, and the possession of concept in turn draws on the discursivity of mind.¹⁰⁹

For (2): Even if our intellect is capable of intuition, why cannot we are also equipped with concepts as well? It seems perfectly possible that our understanding can have the logical use of understanding, which is compatible with the intellectual intuition that is identified as its real use.

¹⁰⁷ For Kant, singular terms such as proper names are disguised general term.

¹⁰⁸ Strictly speaking, in Kant intuition is expressed by pronoun "it". (B142) In fact, the descriptive emptiness of intuition constitutes one motivation for Kant to exclude intuition from the immediate components of judgments and to embrace the view that we think by predicate.

¹⁰⁹ As Kant observes in R4634, "[w]e know any object only through predicates that we can say or think of it" (AA 17:616). In the same vein, it is not controversial if we attribute to Kant the claim that we can communicate only through predicates.

Kant does not say anything on this point. In order to preclude this possibility, Kant has to commit himself to the assumption that the discursivity of understanding must be *thorough*, that is, *any use* of understanding must be concerned with general and reflected representations as long *at least one* use of understanding is so. Now that human understanding is intuitive in its real use, then it leaves no room for a discursive logical use.¹¹⁰

3.4 Against the Sophisticated Argument by Mystical Intuition

3.4.1 The Mystical Intuition Introduced

In spite of the objections, Plato is no fool who would bite the bullet to say that human beings are capable of intellectual intuition. And neither is he attributed to such a view by Kant. Indeed, it is doubtful whether any philosopher has embraced such a wildly implausible view in history. In confrontation of the objections, Plato develops a sophisticated argument based on the naïve argument.¹¹¹ In the following, I will reconstruct the second stage of Plato's argument by drawing on R6080 *On Philosophical Enthusiasm* as the primary material, and I will make reference to *Tone* when necessary. Plato's sophisticated argument runs from the denial of the humanity of intellectual intuition to the introduction of mystical intuition.

(4) Intellectual intuition is non-human.

(5) Intellectual intuition is divine Ideas.

(6) Ideas are conferred on human beings only derivatively and indirectly at their birth by God, and we human beings become acquainted with the Ideas in virtue of mystical intuition.

On Kant's interpretation, Plato immediately identifies intellectual intuition as the kind of representation distinctive of divine understanding, from which Ideas are yielded as the archetype of things. *Idea archetypa* is the representation that brings object into being, and it is also called original representation. The object the divine Idea produces is the archetype of all things: it is the cause of

¹¹⁰ In the framework of the intuition/concept distinction, in addition to the thoroughness assumption, Kant is also committed to the assumption that we have no complete concept at disposal, and to the assumption that no intuition can be employed in judgment.

¹¹¹ In denying that intellectual intuition is human, Kant attributes to the sophisticated Plato the view that human understanding is essentially discursive.

all beings; it is perfect at all points; and it is the causally inert abstract objects that do not exist in space and time.

Now it turns out that the required kind of *a priori* representation is intellectual yet not human. At best, it can be proved that mathematics is made intelligible for God. What does it have to do with our human beings? It seems that we are not approaching to, but distanced from, the objective of making intelligible synthetic *a priori* propositions. Plato is not to be deferred; he takes a *detour* to the destination. Convinced by his previous argument, Plato believes that intellectual intuition is *indispensable* in accounting for *a priori* knowledge such as mathematics, and he also believes that intellectual intuition is *non-human*. There is an obvious gap between the human and the divine. Plato is quite clear that some *further account* must be given so as to bridge the gap. In other words, the above objections show that intellectual intuition is only *necessary yet not sufficient condition* for explaining mathematics. Even if we grant that intellectual intuition is not a sufficient condition, it still leaves open whether intellectual intuition must conjoin other conditions to yield a *sufficient condition*. On Kant's construal, this is precisely the point where Plato's famous doctrine of innate ideas and recollection step onto the stage. As it will be shown, in this detour a longer story is to be told about how human understanding is indirectly acquainted with these Ideas of intellectual intuition.

On Kant's account, Plato tells a complex and obscure story roughly like this: since human understanding falls short of the intellectual intuition, therefore they must stand in a communion relation to God who uniquely possesses this supreme faculty. These innate ideas folded in human mind stem from its communion with God. The *a priori* knowledge of these ideas is nothing but the recollection of the old ideas.

No matter what details are involved in the story, one thing for sure is that we human beings must have epistemic access to the archetypes in the divine understanding. Kant dubs "*mystical intuition*" to designate our access to divine ideas and he introduces this apparatus to bridge the gap between human cognition and divine Ideas and thereby to enable human beings immediately acquainted with Platonic ideas. This representation introduced by Kant is *intuitive* because the ideas are "immediately understood", rather than "inborn concepts that are believed"; it is *mystical* because we have to participate in this by appeal to "the communion with God", since the ideas are in God yet "we could not participate in those on our own". (AA 18:435)

Kant does not say much about the nature of mystical intuition, but we can infer the features it is supposed to have. First, that the mystical intuition Kant introduces is *distinct from* intellectual intuition and sensible intuition. According to the sophisticated argument, Plato assigns different

roles to intellectual intuition and mystical intuition: intellectual intuition plays the role of *creator and giver of the object*, whereas mystical intuition plays the role of *epistemic access to the object*.

Moreover, like any other kind of intuition, the object of mystical intuition is *non-discursively related* and *non-propositional*. Like intellectual intuition, mystical intuition is *not sensible* in that it is immune from the causal affection as the sensible intuition is; otherwise, it will collapse into Kant's pure sensible intuition. Like sensible intuition, mystical intuition is *receptive* in that it cannot produce any object as the divine intellectual intuition does.

The label of mystical intuition is unfamiliar in Kant's philosophy. However, the idea of *intellectual perception* behind label is commonplace in the history of philosophy; indeed, it is one hallmark of classical epistemological rationalism. In antiquity, Plato recognizes that we can have an immediate intellectual grasp of rational insight into the abstract objects. In early modern time, Malebranche holds that our *pure understanding* perceives clearly and distinctly of Ideas as abstract entities in God.¹¹² It is fair to classify Malebranche as another representative of the mystical fanatical path.¹¹³

3.4.2 The Objections to Mystical Intuition

(a) The Insufficiency of Mystical Intuition

Now even if we grant that there is mystical intuition residing in human mind without conflicting with Kant's theory of mind, and even if it is possible to render us to communicate with divine ideas, as Kant himself points out, mystical intuition simply cannot do the job it is expected to do. Kant raises the following objection: "since it is probable that between us and God there is a great scale of beings that extends from us to Him — *genii*, astral spirits, eons — one could first attain communion with these and with the prelude to intellectual original intuitions." (AA 18:435)

This objection to mystical intuition is fatal. Even if we grant that we do possess mystical communion with God, the way of communion with God could be not that simplistic as we might expect such that we could not commune with the Platonic Ideas. As Kant notes, it is probable that there are beings between we human beings and God, but human mystical intuition cannot *tell* whether we are in communion with God *or* with other beings that are superior to us yet inferior to

¹¹² It should be noted that Malebranche's notion of *pure understanding* is distinct from Kant's notion of *intuitive understanding*. Malebranche's notion of pure understanding is a synthesis of the Cartesian pure understanding and Augustinian divine illumination. For Malebranche the pure understanding is human and it is contrasted with sense perception. While it is capable of singular representation, it does create object.

¹¹³ This respectable tradition is revived by contemporary rationalists such as Bealer and Bonjour.

God. When we actually attain communion with such other beings, we might *mistake* this communion as one with God. Archetypes are only peculiar to God, and we cannot find them anywhere else than in communion with God. Therefore, in the prelude to communion with God, we might mistake something else as divine Ideas.

Kant's point is that mystical intuition is *necessary yet insufficient* for guaranteeing us to have an immediate intuition of the divine Ideas as archetypes. The introduction of mystical intuition is motivated by equipping us with faculty that enables us to receive Ideas. Now it turns out that mystical intuition *by itself* is not a reliable source for individuating Ideas that we want. It amounts to saying that even in conjunction with mystical intuition, Plato still does not give the *sufficient condition* to explain the synthetic *a priori* propositions in mathematics. When we take into account Kant's view that not all *a priori* representations are intellectual, intellectual intuition turns out to be neither necessary nor sufficient condition for geometry.

Kant does not say anything more about how to save the mystical fanatical path. He seems to believe that he has done enough to show that mystical fanatical path is hopeless and that this should be the end of the story. It is not difficult for us to infer that, in order to explain the synthetic *a priori* propositions, Kant must embrace the doctrine of divine reliabilism, according to which God guarantees our mystical intuition to be a *proper faculty* to have epistemic access to Ideas. Kant can hardly miss this possibility of appeal to divine reliabilism. Since Crusius is a chief representative of divine reliabilism, I will leave Kant's criticisms on divine reliabilism to the next chapter.

(b) The Faculty Objection and Explanatory Rationalism

In the case of intellectual intuition, the question is raised *whether it is human* in spite of its allegedly indispensable role in explaining mathematics. The answer is obvious; we human beings are incapable of intellectual intuition. Unlike intellectual intuition, it is far from obvious that we are equally incapable of mystical intuition. In the history of philosophy, it is not rare to encounter the doctrine that we human beings are endowed with a special insight into the ultimate reality behind the appearances.

Even if the mystical intuition is not straightforwardly non-human, a further question could nonetheless be raised as to how the mystical intuition can be accommodated with Kant's theory of mind. By this question I do not mean whether mystical intuition could actually be found in what Kant's theory of mind literally says. I mean instead whether it can be compatible with the general

criteria of Kant sets for any coherent theory of mind. For instance, Kant's pure intuition could be accommodated to his framework of human faculties by being identified as *the form of sensibility*.

Initially, it seems not difficult to locate mystical intuition in a theory of mind. The mystical intuition is merely a mystical variant of the more general perception of intellect in the history of philosophy. To be sure, it is the dominant view from Plato to account for our knowledge of abstract entities. However, it is not compatible with the constraint imposed by Kant. In Kant's philosophy, understanding can be defined as the epistemic faculty of which spontaneity is its essential property, and sensibility can be defined as the epistemic faculty of which receptivity is its essential property. In common practice, the spontaneity of understanding is defined in *broadly causal* terms; a faculty is spontaneous *only if* its activity is *not subject to causal affection from without*. Obviously, this definition is derived from a negation of the definition of sensibility in *positive causal* terms. Since understanding is free from causal affection, it can be credited as a faculty of *freedom*, which accords with our intuitive understanding of the *voluntariness* of thinking activity, i.e. that we can think whenever we *will*. According to this criterion, understanding is adequate to be distinguished from sensibility in most cases. As my earlier formulation suggests, freedom from causal affection is only a necessary condition for the spontaneity of a faculty.

In my view, Kant has a demanding, and even peculiar, positive conception of spontaneity. According to this positive definition, a faculty is spontaneous if and only if it can *produce something from within*. I call this the *radical spontaneity thesis*. To be sure, Kant does not make explicit this characterization of spontaneity in his work. But it could be regarded as a working definition that underlies Kant's texts about both human and divine kinds of understanding. The distinction between divine intuitive understanding and human discursive understanding does not merely lie in whether the understanding represents through marks or not. Divine understanding is spontaneous in that it can *produce the object from its representation*, and human understanding is spontaneous in that it can *produce transcendental content into the manifold*. Therefore, both the positive notion of sensibility and that of understanding are defined in *broadly causal* terms.

As it stands, mystical intuition is spontaneous in the negative sense, since its working does not suffer from causal affection from without. However, it obviously falls short of being spontaneous in a more demanding positive sense, since it cannot produce anything from within. According to Kant's scheme, however, the distinction between intuitive understanding and discursive one is exhaustive. The "either-or" distinction is so entrenched that simply no room can be made for mystical intuition in Kant's philosophy of mind. The crux is that between sensibility and understanding there is no middle way of non-causal intellectual perception of abstract entities.

This is the very reason why mystical intuition cannot be accommodated with Kant's philosophy of mind.

In the previous analysis, I assume the tenability of Kant's theory of mind without giving justification for it. The followers of the mystical fanatical path might want to *escape the "either receptive or spontaneous" dilemma* by rejecting Kant's philosophy of mind. It seems that the incompatibility objection simply begs the question of the friends of mystical intuition. What I have said amounts to saying that because Kant's theory of faculties is right, other theories of faculties is wrong. I still owe the friends a justification of Kant's theory of faculties. Kant's objection does not beg the question of the friends of mystical intuition. Kant's radical spontaneity thesis is not drawn out of the air. As we will see, it is instead derived from Kant's assumptions of explanatory rationalism and causal realism, which constitute Kant's most fundamental motivation to raise his objection to mystical intuition. While Kant might differ with his foes in underlying assumptions, it does not make him immediately question-begging.

3.4.3 The Causal Objection and the Causal Realism

The introduction of mystical intuition is incompatible with the Kant's most underlying assumptions of *explanatory rationalism* and *causal realism*. According to Kant's explanatory rationalism, in order for knowledge to be possible, there must be a ground for representation to have relation to object. If the intellectual perception can represent Platonic Ideas, it cannot be a coincidence. There must be some ground for the possibility of representing reality. According to Kant's causal realism, this ground should be a *real* one. Either one relatum causes the other relatum, or vice versa. It cannot be the case that both relata stand in an ideal relation initiated by a common cause. In other words, the supervenience characterization of the relation of causation does not suffice.

Given his underlying assumptions, Kant's most fundamental objection to mystical intuition is that it cannot account for the *ground* of the relation of mystical intuition to divine Ideas, since mystical intuition is neither causally spontaneous nor receptive. In effect, this objection is targeted not only to mystical intuition but also to anything like the perception of intellect.

In the case of sense perception, this question is easy to answer. Sense perception can represent reality precisely because sense perception is grounded in reality by being affected by the latter. When it comes to intellectual perception, the question of grounding becomes much thornier. The friends of the perception of intellect cannot give an account of *why* such "eyes of mind" can represent reality as Kant requires. On some narrow notion of *natural causation*, the grounding simply

seems *impossible*. Since the Platonic abstract entities are *causally inert*, neither can they have causal efficacy nor can they receive causal efficacy. For Kant, the causal innerness of Platonic abstract entities holds only insofar as the scope of restricted to natural causation. *Divine causation* is immune from the restriction, and to relate Ideas with God is not historically practiced, but also philosophically tenable.

Mystical intuition or *intellectual perception* simply *mirrors* the *reality* without influencing reality. Therefore, it is committed to the mirroring model of knowledge. Kant's point is that there is simply no way of taking advantage of the mirroring model of representation without *paying the price* of giving an account of the ground of the representability. Kant's criticism can be seen as against the mirroring model of knowledge, according to which the eye of mind can simply represent the world as it is. In fact, even the mirror metaphor is not proper; the mirror image is also grounded in something.¹¹⁴

Kant's objection to mystical intuition is reminiscent of Paul Benacerraf's celebrated causal objection to mathematical Platonism, which is a case of the general problem of integration challenge articulated by Christopher Peacock.¹¹⁵ The point of Benacerraf's objection is that it is impossible to provide both a satisfactory epistemology and a respectable semantics for mathematical Platonism at the same time. The mathematical Platonism is successful in providing the appropriate truth conditions for mathematical sentences. However, it fails to be accommodated with a causal account of epistemology since abstract objects are causally inert and inaccessible for sense perception. If we cannot develop a satisfactory epistemology, it renders the set of abstract objects entirely *mysterious*.

In fact, this is not a new objection. One of the oldest and most perennial objections to Platonism is that it cannot account for how we can have access to abstract entities if abstract objects are causally inert. Normally, the epistemology of mathematical Platonism makes an appeal to some sort of *perception of intellect* or *rational insight*, which can mirror or reflect the abstract objects without bearing causal relation to them. The standard reply of mathematical Platonism to this objection is to bite the bullet by saying that our access to abstract objects does not draw on sense perception but on some sort of *perception of intellect*.¹¹⁶ The intellectual perception does not have to satisfy the criterion that the account of knowledge in general must be causal.

¹¹⁴ See Benacerraf 1973.

¹¹⁵ See Peacock 1999, 1-12.

¹¹⁶ The most celebrated defenders of this view in modern era are Descartes and Malebranche.

Benacerraf revives this old objection while keeping an eye on the contemporary requirement for a respectable epistemology. Obviously, Benacerraf's objection assumes that a respectable theory of knowledge is a *causal theory of knowledge*. Mathematical Platonism is untenable precisely because its correspondent epistemology cannot be causal. Nowadays the causal theory of knowledge is well-motivated. On the one hand, the paradigmatic case of perceptual knowledge lends credence to it; on the other hand, it is congenial with the naturalist approach to epistemology.

Interestingly, Kant's objection to mystical intuition bears superficial similarity with Benacerraf's celebrated objection to mathematical Platonism. Both of them endorse a causal theory of knowledge. Both Kant and Benacerraf agree that the representation of object presupposed by knowledge is not an epistemic luck, but an epistemic achievement. Therefore, there must be some *causal track* to guarantee the reliability of knowledge.¹¹⁷

Kant's conception of causation or grounding is more general than a contemporary causal theory of knowledge would permit. The latter is committed to a *physiologically casual* theory of knowledge. By contrast, Kant extends it to a *metaphysically causal* theory of knowledge. Metaphysical causation is more permissive than physical or physiological causation. Metaphysical causation even includes, say, the creation of object by means of which intellectual intuition, which is obviously incompatible with a naturalistic approach to epistemology.

Kant is convinced that it is a presupposition of knowledge that *every kind* of representing relation must have a metaphysical ground. Platonism is not a respectable position insofar as it invokes God in explaining knowledge. However, Platonism is a respectable position, insofar as Platonism offers an account of the ground of the relation of representation to object. Kant's previous objection to Platonism is not that this kind of causation or creation presupposed by intellectual intuition is illegitimate, but that it is *not ours*. When it comes to mystical intuition, Kant's point is significantly different. The problem of mystical intuition lies not in that the representation of object is *magical*, but in that this relation is *groundless*: mystical intuition is incompatible neither with empirical path nor with the transcendental path.

In line with this general requirement, Kant himself provides a causal theory of *a priori* knowledge. As we will see in Chapter 5, in his own transcendental path Kant draws a distinctive idealistic conclusion. In short, the difference between Platonic rationalism and transcendental philosophy lies in whether to *introduce a third thing*, namely, God, or to *change the established notion of the second thing*, namely, object. Now Kant is rejecting the alternative of introducing God and his

¹¹⁷ Roughly speaking, the problem of the relation of *representation*, or *cognition*, to object is the presupposition of the problem of *knowledge*.

intellectual intuition and discarding the underlying realistic metaphysics. Kant discards realism for idealism for two reasons: on the one hand, *we cannot produce abstract entities*, since they are not ontologically inferior; on the other hand, *we cannot contact them, either*, since they are causally inert,

For Kant, Platonism is wildly implausible. Kant's move is to reject Platonism at the price of reviving idealism. Since idealism is generally regarded as incompatible with naturalism, it is even worse for a naturalist.¹¹⁸ What allies Kant and the causal theorists of knowledge is not *epistemic naturalism*, but *epistemic atheism*. Although both of them are motivated by the rejection to introduce supernatural entities, epistemic atheism cannot be deflated into epistemic naturalism. Epistemic atheism is a broader view than epistemic naturalism: the former implies the latter, but not vice versa. Therefore, the difference between Benacerraf and Kant comes down to the difference in their deeper philosophical commitment. Benacerraf's requirement of the causal account of knowledge is motivated by *epistemic naturalism*, whereas Kant's demand on the ground of the relation of representation to object is guided by his *explanatory rationalism*.

Now the only possible way for rationalists to escape the mystical intuition is to resort to divine reliabilism. They do not have a chance, however. As we will see in next chapter, in examining the logical fanatical path, Kant mounts an array of arguments against this move for its being guilty of explanatory anti-rationalism and of epistemic theism. At a bottom level, Kant's project against the logical fanatical path constitutes a knocking-down objection to the neglected alternative: the Cartesian epistemology.

¹¹⁸ For the compatibility between naturalism and Platonism see Linsky and Zalta 1995.

Chapter 4 Against the Logical Fanatical Path

4.1 Introduction

The logical variant of the fanatical path is also a species of the fanatical path. Like its mystical relative, the logical variant is committed to (1) enthusiasm, (2) innatism, but it does not commit to mysticism. In contradistinction to mysticism, Kant dubs the label “logical system”, as he writes in R5637 dated to 1780s: “the logical system of the cognitions of the understanding is either empirical or transcendental. The former Aristotle and Locke, the latter either the system of epigenesis or that of involution, acquired or inborn.”(AA 18:275) As R5637 indicates, the logical system includes a variety of positions: the system of physical influx, the system of epigenesis, and the system of preformation. What these logical systems have in common is their allegiance that what figures in the explanation of *a priori* knowledge is not intuitions, but concepts, by means of which thought can be made explicable.

In the Herz letter and other places, Leibniz and Crusius are regarded as the representatives of the logical fanatical path. In the following, I will choose Kant’s contemporary German philosopher Crusius as the focus of my study. As Crusius’ German contemporary, Kant’s knowledge about his works is unparalleled in following respects. Kant’s knowledge of Plato is desperately unreliable; he mistakes the Christianized Plato as Plato himself. By contrast, Kant has first-hand and in-time knowledge of Crusius. Kant’s knowledge of Hume is deplorably incomplete; he mistakes some of Hume’s views for all his views. By contrast, Kant has complete and systematic knowledge of Crusius.

As the most preeminent opponent to the dominant Leibniz-Wolffian philosophy before Kant, Crusius’ philosophy represents an important alternative to Wolff, Baumgarten, Meier, etc. In spite of their difference, Crusius is still lumped together with Wolff as “dogmatic to the highest degree” (AA 18:33). However, Kant does not dismiss their positive role in philosophizing, and his attitude is recorded in what follows in R4936: “through the new paths that they trod they at least prevented understanding from allowing its rights to become superannuated in stupid idleness and still preserved the seed for a more secure knowledge.” (AA 18:33-34)

Strikingly, many elements in Kant’s transcendental philosophy are anticipated in Crusius. Both Crusius and Kant acknowledge the actuality of the synthetic *a priori* propositions in metaphysics; both of them believe that there are supreme principles for this kind of propositions in the same way the principle of the contradiction for the analytic propositions; both of them are convinced that objective necessity must be found in subjective necessity. Crusian philosophy can

be seen as an interesting halfway house to transcendental philosophy. Indeed, Kant occasionally classifies it together with his own philosophy under the label of transcendental philosophy. (AA 18:275) Perhaps it is in Crusian philosophy that we can see, far more clearly than in anywhere else, what assumptions prevent Crusius from launching Copernican Revolution, and where Kant decisively takes his departure from the traditional rationalist metaphysics. Crusius revives a Cartesian epistemology in Germany, which fills the last gap in Kant's philosophical spectrum.

After the publication of 1781 *Critique*, Kant became increasingly aware of the systematic importance of the “middle way” represented by the logical fanatical path, and he made various attempts to tackle this issue in his publications such as *Prolegomena*, *Metaphysical Foundation* and the 1787 *Critique*. In effect, the logical fanatical path is arguably the most important rival theory to Kant's transcendental path. On the one hand, the empirical path does not acknowledge the existence of the synthetic *a priori* truths, and the mystical fanatical path is replaced by Kant's own transcendental path. On the other hand, the logical fanatical path is committed to the Cartesian rationalist epistemology that is still kept alive in more moderate forms in contemporary philosophy.

Commentators generally recognize Crusius' formative influence on Kant, and the studies on Crusius are diffusing in direction. Nevertheless, I will approach Crusius in a different manner by thematizing and concentrating on the defined issue of the relation of representation to object and by unifying the two pillars of the criterion of truth and intellectual pre-established harmony in a single system. In section 4.2, I will reconstruct Crusius' epistemology and its metaphysical foundation with reference to his criterion of truth and intellectual pre-established harmony. In section 4.3, I will argue that Crusius' argument for the criterion of truth cannot go through, since the assumption that apriority implies innateness is untenable. Even if the inference is unproblematic, the criterion of truth itself is vulnerable to several objections. For instance, the innateness of the criterion of truth commits Crusius to the rationalist version of occult quality, which runs counter to Kant's explanatory rationalism. In section 4.4, I will show in what sense Crusius is ironically a follower of the system of pre-established harmony, to which he shows open hostility. While the logical fanatical path represents the plausible “middle way”, Kant's raises a number of criticisms to this intellectual pre-established harmony. On the bottom level, the logical fanatical path is compatible neither with causal realism nor with epistemic atheism.

4.2 The Crusian Epistemology and Metaphysics

Kant's criticisms of Crusius are overall, comprehensive and fruitful, and they almost touch every aspect of the latter's theoretical philosophy. In spite of this, we cannot find any text that can

be paralleled in its entirety and systematicity to those on Plato; it is true that Kant's *Inquiry Concerning the Distinctness of the Principles of Natural Theology and Morality* (1764)¹¹⁹ includes a most detailed and informative discussion of Crusius in the pre-critical period. However, Kant makes a quite different point on Crusius in his critical period; and the point he makes in *Prolegomena* (1783) and in the *Critique* (1787) also differs in important respects. Therefore, in the following, I will reconstruct Kant's interpretations and criticisms of Crusius from a wide range of Kant's texts.¹²⁰

Crusius maintains that there are three highest principles of reason concerning the distinguishing features of things and non-things. The first principle is (1) the **principle of contradiction** that nothing can be and not be at the same time, which is widely recognized for its validity. In contrast to the orthodoxical Wolffians, Crusius makes the crucial move of restricting the scope of the validity of the principle of contradiction. Crusius makes the contention that *not all* that cannot be thought can be explained in terms of the principle of contradiction, and thus he puts the non-logical unthinkability on a par with the logical unthinkability. In addition to the principle of contradiction, Crusius formulates two novel non-logical supreme principles: (A) the **principle of the inseparable**: what cannot be thought apart from each other also cannot exist apart from each other, and (B) the **principle of the uncombinable**: what cannot be thought with and next to each other also cannot exist with and next to each other.¹²¹

Crusius is not content with formulating the principle of inseparability and that of uncombinability; rather, he further explores the foundation of all these three principles. According to Crusius, the three previous principles are only *parts* of the highest distinguishing feature of the truth "*that what cannot be thought as such is not possible or actual, and that, by contrast, what can be thought is possible*"¹²². In effect, Crusius claims that epistemic conceivability and metaphysical possibility are co-extensive.

Although in Crusius' mind the three highest principles are concerned with the existence of things, they are apt to be reformulated as concerned with the truth of propositions. Crusius draws a distinction between the formal and material principles in metaphysics. The principle of non-contradiction is the supreme principle of all formal principles, and the principle of inseparability and that of uncombinability are supreme principles of all material principles. In other words, the three highest principles could be construed as the grounds of the truths of these propositions. The

¹¹⁹ Abbreviated as *Inquiry* thereafter.

¹²⁰ Again, what matters is not what Crusius says, but how Kant conceives Crusius. The following reconstruction is primarily based on Kant's reception of Crusius in his works. This outlining of Crusian philosophy draws on the translation of Crusius by Watkins 2009.

¹²¹ See Watkins 2009, 140.

¹²² Watkins 2009, 140-141.

principle of non-contradiction is the highest principle that *grounds* all formal principles. The principle of inseparability and that of uncombinability are the two highest principles that *ground* all material principles.

Note that for Crusius the distinction is drawn *within* metaphysics, for which Crusius so writes: “[t]here are **two kinds of truths**. Some are **contingent**, [...] However, others are **necessary**[...]. Now, metaphysics ought to treat of necessary truths. [...]”¹²³. It is clear that for Crusius metaphysics is assumed to be concerned with necessary truths. By acknowledging the material metaphysical principle Crusius is committed to the view that there are necessary truths which are unexplainable by appeal to the principle of non-contradiction.

The status of the highest principle of understanding is ambivalent. In most cases, Crusius takes the highest principle of understanding as *metaphysical*. In other cases, Crusius also accords this highest principle with *epistemic* function, and he refers to it as *the criterion of truth*, by means of which we can distinguish truth from error. When it functions as an epistemic criterion of truth, it is reformulated by Kant as “what cannot be thought as other than true is true” (AA 2:295). In the following I will call it the *C-criterion of truth* (named after Crusius):

For any p , p is true if and only if p cannot be thought other than true.

So we have to reformulate the Crusian philosophy in Kant’s terminology such that we are able to be in a position to compare them. In my view, the Crusian formal/material distinction is co-extensive with the Kantian analytic/synthetic distinction. The formal principles of metaphysics rest on the principle of non-contradiction. Consequently, the material principles can be defined negatively as those that do not rest on the principle of non-contradiction.¹²⁴

The Crusian distinction between material and formal principles does not merely anticipate Kant, and it is even taken over by Kant. The Reflections dated to the middle and late 1760s lends evidence to this view. Kant adopts the terminology of material and formal principle in his unpublished notes in a typical Crusian way. More importantly, he uses metaphysical principles and

¹²³ Watkins 2009, 137-138.

¹²⁴ On a simplistic interpretation, these two distinctions are even synonymous. However, the complexity of Kant’s definition of analyticity should be underrated. Traditionally, it is the non-contradiction characterization, rather than containment characterization, lies at the center of Kant’s notion of analyticity. Recently, Anderson argues that the containment account of the analyticity is fundamental. For Kant’s threefold definition of analyticity see Anderson 2015.

synthetic ones interchangeably. In the Reflection 3922 dated to 1769 Kant writes: “[*m*]aterial principles seem to be: whatever happens, must have a ground. Every successive series has a beginning.” (AA 17:346) And in one following paragraph, Kant continues: “[a]nother synthetic principle is: whatever thinks is only a simple subject.” (AA 17:347)

In the R3923 Kant further links the analytic/synthetic distinction to the formal and material aspects of human cognition: “[s]ome principles are analytic and concern the formal aspect of distinctness in our cognition. Some are synthetic and concern the material aspect, in which case they are the arithmetical, geometrical, and chronological principles.” (AA 17:348)¹²⁵

In Kant’s terminology, to say that all truths in metaphysics are necessary is just to say that all propositions are *a priori*. By acknowledging the actuality of material principle in metaphysics, it is safe to conclude that Crusius is in effect committed to both the actuality thesis and the synthetic apriority thesis and thus to their conjunction that the synthetic *a priori* propositions are actual.

Since the explanation of the analytic propositions is as unproblematic for Crusius as for others, in the following I will reconstruct Crusius’ account for the possibility of the synthetic *a priori* propositions:

(4.1) The synthetic *a priori* propositions are actual.

(4.2) The ground of the synthetic *a priori* propositions is the C-criterion, namely, the nature of understanding. (C-criterion of truth)

(4.3) The C-criterion as the contingent mental structure is implanted by God. (Divine Reliabilism)

For (4.1): Compared to the Platonic argument, it is less awkward to reformulate the Crusian argument in Kant’s terminology. Crusius identifies a new kind of *a priori* knowledge which cannot be explained by the principle of non-contradiction. Kant considers this as a crucial progress; in his pre-critical work *Inquiry*, Kant writes: “Crusius is also right to criticize other schools of philosophy for ignoring these material principles and adhering merely to formal principles. For on their basis alone it really is not possible to prove anything at all.” (AA 2:295)

¹²⁵ The difference between the two distinctions should be called into attention. For Kant analytic propositions are not truths in metaphysics, but instantiations of rules in logic.

The existence of the synthetic *a priori* propositions underpins the anti-empiricist view that not all knowledge is derived from experience. This point is less significant, for the actuality of the *a priori* propositions is commonplace in German rationalist tradition. In fact, the coextension between necessity, analyticity, and apriority lies at the heart of the German rationalist tradition. In a more significant sense, however, this move can be seen as a deviation from the traditional rationalist view by arguing that not all *a priori* knowledge draws on conceptual analysis.

For (4.2): Crusius does not only acknowledge the existence of the synthetic *a priori* propositions, and he is also committed to the assumption of the ground of truth that *every truth must have a ground*. Therefore, there must be a supreme principle of truth for the synthetic *a priori*, as the principle of contradiction for the analytic *a priori* propositions. Even if the synthetic *a priori* propositions are indemonstrable, initially it does not imply that there is no criterion for us to *tell* the true from the false. Crusius introduces the C-criterion as the criterion of the truth of the synthetic *a priori* propositions: for any proposition *p*, *p* is true if and only if *p* cannot be thought other than true. According to Crusius, the C-criterion of truth that “what cannot be thought as other than true is true” is *identified* with “the essence of our understanding”¹²⁶. The unthinkability or inconceivability is nothing other than the *innate* principle, or the *contingent* structure of human mind that is endowed to us along with our existence.

For (4.3): Kant refers to the C-criterion of truth as innate or implanted. If the C-criterion of truth is not an utterly contingent fact, then there must be an implanter of it. Not surprisingly, Crusius identifies this implanter as God. Since the C-criterion of truth is a *general* rule, this appeal to God revives Leibnizian pre-established harmony. The system of pre-established harmony is essentially a common cause model. On this model, Crusius claims that thoughts and things outside of thoughts co-vary without genuinely causing each other.

Kant agrees with Crusius that there are synthetic *a priori* propositions. However, Kant disagrees with the Crusian explanation of them, and he mounts a number of harsh criticisms of (4.2) and (4.3). The following two sections are devoted to examining them respectively. In this course, Kant reveals most of his fundamental assumptions, which turn out to have important consequence for making intelligible the motivations of Kant’s criticisms.

4.3 Against the C-Criterion of Truth

¹²⁶ Watkins 2009, 143.

4.3.1 From the *A Priori* to the Innate

Consider the first two steps of the above argument attributed to Crusius:

(4.1) The synthetic *a priori* propositions are actual.

(4.2) The ground of the synthetic *a priori* propositions is the C-criterion, namely, the nature of understanding. (C-criterion of truth)

In order for the inference from (4.1) to (4.2) to go through, Crusius is committed to the following assumption:

(A4.1) All and only *a priori* representations are innate.

Given that both the distinction between the *a priori* and the empirical and that between the innate and the acquired are mutually exclusive and jointly exhaustive, in taking the assumption (4.1) Crusius is enforced to embrace another assumption:

(A4.2) All and only empirical representations are acquired.

From the fact that both the *a priori*/empirical and the innate/acquired distinctions are mutually exclusive and jointly exhaustive, it is tempting to infer that the twofold distinctions are co-extensive. In fact, it is even alluring to take a further step to hold that the twofold distinctions are not only co-extensive but also *co-intensive*. In other words, they are just different *terminological* expressions of the same *conceptual* distinction.

However, Kant firmly rejects such a co-extensive reading by arguing for the existence of the acquired *a priori* representation.¹²⁷ In the following, I will first survey the notion of acquisition and then examine its relevance to the argument from (4.1) to (4.2). The idea of *a priori* acquisition might seem striking, but it is not rare even in Kant's publications. In his *Inaugural Dissertation*, Kant points

¹²⁷ For a discussion of the qualitative difference between rationalists' innate ideas and Kant's *a priori* representations see Zöller 1989.

out that one could acquire the pure concepts of understanding “by attending to its actions on the occasion of an experience” (AA 2:395). In his private note R3930 dated to 1769, Kant offers a more elaborate version of *a priori* acquisition by suggesting that the pure concepts of understanding are abstracted “from the law of the understanding for comparing, combining, or separating abstracted concepts” (AA 17:352). To be sure, the fact that Kant does not adopt this abstraction theory of the acquisition of the *a priori* concepts of understanding in the *Critique* suggests that he might have a different story in his career of publishing his *Inaugural Dissertation*. However, it is adequate to show that there are indeed *a priori* concepts which are acquired, rather than inborn.

Kant draws the distinction between the *a priori* acquisition and the *a posteriori* acquisition. In the R4851 dated to 1776-1778, Kant explicitly writes: “Whether concepts are mere *educta* or *producta*.” (AA 18:8) After several lines, Kant continues that “[*a*]cquisitae are *a priori* or *a posteriori* acquisite” (AA 18:8). Kant sometimes discusses acquired representations with a different set of terminology. In *On a Discovery whereby any New Critique of Pure Reason is to be Made Superfluous by an Older One*¹²⁸, Kant draws a further distinction between the original acquisition¹²⁹ and the derivative acquisition within acquired representations. The original acquisition is applied to the representations that “previously did not yet exist at all, and so did not belong to anything prior to this act” (AA 8:221). These representations are nothing other than categories as well as space and time. Correspondently, the derivative acquisition is applied to empirical intuitions and concepts.

Kant further characterizes the mechanisms underlying both kinds of acquisition are radically different. In illustrating *producta* in the R4851, Kant writes: “[*p*]roducta either through physical (empirical) influence or through the consciousness of the formal constitution of our sensibility and understanding on the occasion of experience, hence *producta a priori*, not *a posteriori*.” (AA 18:8) On the one hand, both the *a priori* acquisition and the *a posteriori* acquisition are initiated “on the occasion of experience”. On the other hand, they also operate differently: the *a posteriori* acquisition is grounded by physical influence, while the *a priori* acquisition is grounded by consciousness.

Then, what is the difference between the innate and the *a priori* acquired concepts? As Kant explains, all *a priori* concepts are acquired “on the occasion of experience”. Therefore, the difference between the innate and the *a priori* acquired concepts could be formulated in terms of their temporal relations to experience. The innate concepts are temporally anterior to experience, while the acquired concepts are not so. Consequently, Kant’s disentanglement of the innate with

¹²⁸ Abbreviated as *On a Discovery* thereafter.

¹²⁹ It is borrowed from the use in natural right.

the *a priori* constitutes a defense of *temporal empiricism*, according to which “all our cognition **commences with** experience” (B1).¹³⁰

In order to explain why (A4.2) is more fundamental, we should make reference to Kant’s mistake objection to the source of representation or knowledge.¹³¹ The failure to distinguish the original cause from the occasional cause applies not only to the followers of the empirical path but also to those of the logical fanatical path. If the innate concepts are anterior to human experience, it is tempting to think that all other representations are acquired not only *on the occasion of* but also *from* experience. If someone is committed to (a) a qualified empiricism without distinguishing the original cause from the occasional source, and (b) the existence of synthetic *a priori* truths whose explanation is in order, then it seems necessary that these truths are explained by innate representations rather than acquired ones.

Strictly speaking, what the existence of the acquired *a priori* representation challenges is the claim (A4.1.1) that all *a priori* representations are innate. In other words, it is consistent with the claim (A4.1.2) that only *a priori* representations are innate, or the claim (A4.1.2*) that all innate representations are *a priori*. Nevertheless, it suffices to falsify the claim (4.1) that all and only *a priori* representations are innate. Since the assumption (A4.1) is untenable, Crusius’ argument from (4.1) to (4.2) cannot go through.

Since the *a priori* is not co-extensive with the innate, the *a priori*/empirical distinction and the innate/acquired distinction are not co-extensive; rather, there exists an intersection between the twofold distinction. The difference between the twofold distinction could be captured in intensional terms: the *a priori*/empirical distinction is formulated in terms of the original cause of a representation, while the innate/acquired distinction is formulated in terms of the temporal relation of representation to experience.

Now it turns out that the classical empiricism and the Cartesian rationalism are the two sides of the same coin.¹³² To be sure, empiricism and rationalism display an apparent difference: the empiricists believe that ideas are derived from experience, while the rationalists insist that there are innate ideas in addition to empirical ones. As Kant reveals, however, both empiricism and rationalism mistake of the occasion of knowledge for the source of it. What distinguishes them is merely that rationalists admit a wider scope of knowledge to be explained. Due to the failure to distinguish the occasion and the origin, once the rationalists find that *a priori* knowledge cannot be

¹³⁰ For Kant’s critical engagement with various kinds of empiricism see Winkler 2010.

¹³¹ See Chapter 2.

¹³² Since Leibniz is of a dispositional view of innate ideas and distinguishes the occasion of knowledge and the source of knowledge, he is understandably not the target under attack.

explained by experience, they are unavoidably driven to the opposite of the empiricists by making an appeal to innate ideas. The surprising convergence between the empirical path and the fanatical path is not rare. As we will see later, Kant shows that both Crusius and Hume end up with skepticism. Together with Kant's distinctive model of ground, we come to see better why Kant and his transcendental path should be reduced neither to the empirical path nor to the fanatical path.

In fact, Kant does not only deny the inference from the *a priori* to the innate but also denies the existence of innate ideas themselves. As Kant makes it clear, “[t]he *Critique* admits absolutely no implanted or innate *representations*” (AA 8:221). All representations, may they be *a priori* or *a posteriori*, are acquired. For Kant, innate *a priori* and acquired *a priori* representations are not two species of which *a priori* representations are the genus. Rather, *a priori* concepts must be acquired, rather than innate. The point is not that the notion of innate ideas is conceptually incoherent or empirically unfounded, but that they are incompatible with some of Kant's most committed assumptions such that they are rendered explanatorily illegitimate.

I would like to remind the reader that Kant's view on innatism is quite complex, and we should be cautious in clarifying Kant's precise position. On my reading, Kant is an adherent both to *representational anti-innatism* and to *constitutional innatism*. As I have mentioned, Kant rejects empiricism in general and its mistake of the occasion for the source of knowledge in particular, but it is incorrect to suggest that he is an advocate of innate ideas, which is widely considered as one hallmark of rationalism. In fact, from his early career, Kant has distanced himself from the rationalist view that apriority implies innateness; he instead attempts to disentangle the notion of *a priori* from that of the innate.

However, it is equally incorrect to suggest that he is a thorough anti-nativist. Note that the scope of anti-innatism is carefully restricted to *representations*. Kant does not unwisely extend his anti-innatism to its extreme. Rather, he happily acknowledges that our faculties of receptivity and spontaneity are innate. Kant makes it explicit that there must be grounds in the subject that makes the representations to arise in a determinate manner. Kant identifies the *receptivity* and *spontaneity* peculiar to our mind as these grounds of the acquired representation, and he suggests that these *grounds themselves* are not acquired but innate. Thus, Kant commits himself to *constitutional innatism*, which should be distinguished from his *representational anti-innatism*. Kant probably holds that the view that we have faculties endowed to us at our birth is uncontroversially as well as uninterestingly true.

4.3.2 Objections to the C-Criterion

4.3.2.1 The Inadequacy Objection to the C-Criterion

Even if the assumption of co-extensionality is acceptable and the inference goes through, the C-criterion itself is still vulnerable to several objections, which I will spell out in the following. First, Kant vehemently attacks the correctness of the C-criterion of truth. The first set of Kant's objections to the C-criterion is presented in the *Inquiry*:

But it is not possible to invest some propositions with the status of supreme material principles unless they are obvious to every human understanding. It is my conviction, however, that a number of the principles adduced by *Crusius* are open to doubt, and, indeed, to serious doubt. (AA 2:295)

In the first place, Kant casts doubts on the truth of the supreme principle by the argument from *universal assent*. Unlike Locke, Kant does not appeal to the case of children and idiots. In my view, this is because Kant does not want to argue about the status of the metaphysical formal principle that is grounded on the principle of contradiction, to which Kant wholeheartedly subscribes himself. Rather, Kant intends to challenge the much more controversial material principles in Crusian metaphysics. Kant puts forward the following scheme to examine the supremacy of a principle that some proposition P is the *supreme* material principle in metaphysics only if P is *beyond doubt* for *every* human understanding.¹³³

It turns out that many propositions which pass the test of the C-criterion of truth leave open to doubt, at least for Kant. In effect, it amounts to saying that the criterion is *arbitrary* and *indefinite*. On the one hand, it is too *liberal*, and it allows the illicit principles to slip in; on the other hand, it is too *tyrannical*, for it prevents the licit ones from being admitted in.

Its force notwithstanding, the above objection is an *empirical* one. It could be conceived that the metaphysical principles otherwise formulated by Crusius *happen to* be evident to *every* human understanding, including Kant himself. If no empirical objection is available, does it mean that the C-criterion is tenable? Or put it simply: does universal assent guarantee the sufficiency of the C-criterion?

This objection is not conclusive. Crusius is still left with room to argue that the C-criterion is correct, yet it is *not well practiced*. At first, it appears that this rejoinder should be dismissed as the

¹³³ Kant could be regarded as locating himself in the tradition of defining knowledge in terms of doubt.

insignificant. However, it does have a preeminent precedent in history; Descartes formulates his rule of clear and distinct perception as the criterion of truth, and we can call it D-criterion:

For any p , p is true if and only if p can be perceived clearly and distinctly.

However, the formulation of the D-criterion does not automatically enable people to perceive clearly and distinctly. Descartes holds that his *Meditations on First Philosophy* is precisely meant to *teach* people *how* to perceive clearly and distinctly. In a letter written to Mersenne, Descartes explicitly claims that “we have to form distinct ideas of the things we want to judge about, and this is what most people fail to do and what I have mainly tried to teach by my *Meditations*”¹³⁴. It leaves open that some people might still remain incapable of clear and distinct perception after reading the *Meditations*.

If one cannot demonstrate the truth of a criterion, then he might make an appeal to the phenomenology of certainty to tell the true from the false. Kant raises the objection that the phenomenal character of subjective conviction is inadequate for establishing truth. In his doctrine of belief and knowledge (*Wissen*)¹³⁵, Kant defines apodictic certainty as follows:

For any proposition p , p is apodictically certain if and only if it is conscious of the impossibility of the contrary of p .

Kant notes that certainty is only a mark of knowledge. That is, apodictic certainty is at best a necessary condition, rather than a sufficient condition, of knowledge. Every instance of knowledge must be certain, but not every instance of certain belief is knowledge. Certainty by itself is only subjectively valid. One should not rest the objective validity of a proposition on its subjective validity.

Kant’s criticisms of Crusius are much deeper than this. Kant does not only argue that the C-criterion is *not correct*, or *not adequate*, but he further argues that it is *not even a criterion*. After the last quotation from the *Inquiry* Kant continues to write:

¹³⁴ Descartes 1991, 165.

¹³⁵ For a study of Kant’s theory of belief and knowledge see Chignell 2005.

This celebrated man proposes setting up a supreme rule to govern all cognition and therefore metaphysical cognition as well. The supreme rule is this: *what cannot be thought as other than true is true, etc.* However, it can easily be seen that this proposition can never be a ground of the truth of any cognition. For, if one concedes that there is no other ground of truth which can be given, apart from the impossibility of thinking it other than true, then one is in effect saying that it is impossible to give any further ground of truth, and that this cognition is indemonstrable. Now, of course, there are many indemonstrable cognitions. But the feeling of conviction which we have with respect to these cognitions is merely an avowal, not an argument establishing that they are true. (AA 2:295)

Here Kant's point is that the C-criterion of truth is unacceptable not because the criterion is *false*, but because it is not a *criterion* at all. Underlying the criticism Kant imposes normative constraints on the conception of criterion. For Kant, the demonstration is essential for establishing the correctness of a criterion of truth. An indemonstrable criterion of truth amounts to no criterion of truth at all.

Kant pushes his objection to its logical conclusion by claiming that the C-criterion is not even a criterion. This radicalized objection is methodological in character, and it claims that Crusius opens the door of *dephilosophization*, for he *downplays the role of demonstration or proof as a method* in philosophy. As Kant writes in the *Logik Philippi*, "Crusius has an anti-philosophical method which undermines all philosophy. He advances things as subjective laws which are often only the effects of the understanding and not laws. He has sheer phantoms of the brain. He casts aside all means of proof." (AA 24:335) As the passage shows, Kant generalizes the role of proof in philosophy. Proof is not only essential to any attempt to establish a criterion of truth, but it lies at the heart of the methodology characteristic of philosophy. To undermine the role of proof is precisely to undermine philosophy.

Even at the moment when his esteem of Crusius is at its climax, Kant betrays his reservation with Crusius' general methodological approach. This is made most evident in Kant's critical engagement with Wolff and Crusius in regard to the question of the principle of sufficient ground. In the 1755 *A New Elucidation of the First Principles of Metaphysical Cognition*¹³⁶, Kant provides a proof for the principle of sufficient ground in the hope of saving it from Crusius' powerful criticisms on those offered by Wolffians. Kant admits that the previous attempts of demonstration for the principle of sufficient ground are unsuccessful and that he is sympathetic to the motivation of Crusius' criticisms.

¹³⁶ Abbreviated as *New Elucidation* thereafter.

However, Kant is not convinced that any argument for the principle of sufficient reason is impossible. Instead, Kant formulates his own version of argument by resting it upon the principle of complete determination. Kant deplores that Crusius is too soon to be driven by the previously unsuccessful attempts to the conclusion that the principle of sufficient ground is *indemonstrable*. On the contrary, what we should do is not to give in; rather, Kant maintains that we can discover a far better demonstration for the principle of sufficient reason. Not only should we trust that the principle of sufficient ground must be true, but also we should insist that it can be *demonstrated* at all.¹³⁷

While Kant turns the fire against rationalism in general, including his dogmatic past, Kant's insistence of the demonstrability of the principle of sufficient ground is retained well into his mature critical period. In the Second Analogy, Kant rejects the *dogmatic proof* (proof by analysis of concept) of any kind as impossible by underlining the radical difference between analytic and synthetic propositions. (A209/B255) Instead, Kant provides a *transcendental proof* of the principle of sufficient ground, which receives ever-lasting acclaim. In a nutshell, Kant disagrees that all proofs must be dogmatic, but he agrees that there must be proof.

For the present purpose, what is at issue is not whether Kant provides an unprecedentedly successful demonstration for the principle of determining ground by "having overcome every difficulty" (AA 1:398); neither does it concern whether the principle should be demonstrated dogmatically or transcendently; what is at issue is Kant's meta-philosophical outlook that philosophy should *encourage* analysis and argument: philosophical intuition should be susceptible to analysis and philosophical claim should be supported by demonstration.

Kant's conviction that philosophical principles could and should be discursively proved, rather than immediately intuited, does not come by accident. Rather, it is deeply rooted in the Leibnizian tradition in Germany. In the following I will explore a little bit the traditions lay behind them. The Leibnizian methodology has been deeply entrenched into the philosophical practice in Germany. The Leibnizian tradition grows in its opposition to Cartesian tradition and developed by Christian Wolff and his followers. The Cartesian methodology aims at teaching people how to perceive clearly and distinctly. Leibniz dismisses the Cartesian criterion of clear and distinct perception as obscure, and we should instead replace it with a more articulated criterion. In a nutshell, the Cartesian epistemology attaches great importance to the *intuitive grasp of truth*, while the Leibnizian epistemology rests the work upon *conceptual analysis*.

¹³⁷ In *New Elucidation* Kant's reservation about Crusian approach to philosophy is moderate and even implicit. However, his scruple is gradually developed into avowed criticisms.

In his Third *Meditation* Descartes writes that “whatever I perceive very clearly and distinctly is true”¹³⁸, and thereby he formulates the criterion of truth in terms of clear and distinct perception. We can call it D-criterion (named after Descartes): for any p , p is true if and only if p can be perceived clearly and distinctly. Echoing Gassendi, Leibniz raises his objection to Descartes’ criterion of truth by suggesting that it is obscure.¹³⁹ If a criterion of truth is obscure, it means that the criterion requires another criterion which is more articulately formulated so as to clarify the previous criterion. In other words, the obscurity of the criterion of truth immediately generates a regress if not an infinite one. Given the systematicity of the Cartesian Epistemology, further questions are raised as to what is the relationship between *cogito* and the new principle. Leibniz’s positive proposal is to replace this criterion of clear and distinct perception with other criterion of more *logical* import.¹⁴⁰

Crusius’ denial of the demonstrability of metaphysical principles and his affirmation of the phenomenology of certainty are the two sides of the same coin. His definition of truth in terms of subjective unthinkability is nothing but an appeal to rational insight to certainty. In effect, Crusius’ invocation to rational insight is a return from the German rationalist tradition of Leibniz and Wolff to Descartes and Malebranche. The crucial move made by Crusius is to subordinate the Leibnizian dichotomy between truth of reason and truth of fact under the single supreme principle of the nature of understanding.

Kant is the heir of Leibnizian rather than Cartesian school. The Leibnizian tradition is formative to the intellectual development of Kant. For Kant as well as for many others, that is how philosophy should be conceived and practiced. While Kant is inclined to align himself with Crusius against the Wolffian orthodoxy on many substantive questions, with regard to cognitive machinery Kant is clearly aware of the superiority of Wolff and his followers to Crusius. Although Kant is probably not aware that in effect Crusius is reviving the Cartesian Epistemology which Leibniz has harshly criticized, he knows well about Plato and Malebranche and what goes wrong in their philosophy. Crusius’ criterion of truth is more dangerous than Plato.

Kant’s criticism against the Crusius is much stronger than that of Leibniz against Descartes. For Leibniz Descartes is a *rival*; Cartesian epistemology of clear and distinct perception should be

¹³⁸ Descartes 1984, 24.

¹³⁹ Gassendi levels fierce criticisms on the Cartesian conception of clear and distinct perception in his famous *Fifth Set of Objections*. See Descartes 1984, 179-240.

¹⁴⁰ Leibniz’s obscurity objection appeared first in his *Meditations on Ideas, Truth, and Knowledge* (1989, 23-27) and then again in his *New Essays* (1996).

replaced by a more logically and mechanically oriented standard. For Kant Crusius is not even a *heterodoxy*; the Crusian epistemology of truth claims “the death of philosophy” (AA 24:82).

4.3.2.2 The C-Criterion as Occult Quality

While the above set of objections is directed to the C-criterion *in particular*, the following set of Kant’s objections is concentrated on innate representation *in general*. Since the C-criterion of truth is an instance of the innate principle, this set of objections also applies to it. However, it does not only direct itself to a nativist account of a particular criterion of truth; rather it directs itself to any nativist theory of representation in general.

Kant’s standard objection to the representational innatism of the C-criterion is that it makes an appeal to *qualitates occultas*. The *qualitates occultas* objection is interesting. As I have noted, Kant offers a classification of the philosophical spectrum with regard to the different paths of metaphysics. According to the spectrum, the occult quality is a distinctive system for explaining the grounding relation of representation to object, which is mainly applied to the common sense theorists such as Reid. The system of occult quality is characterized by explaining things trivially by appealing to the paradigmatic schema that x is F simply because x is F. Given the methodological considerations, Kant is inclined to dismiss the system of *qualitates occultas* without detailed discussion. To be sure, the entire system of Crusius occupies a distinctive position in Kant’s spectrum that should not be conflated with *qualitates occultas*. However, it does not prevent any level of the system from resorting *qualitates occultas* as the principle of understanding. In the discussion of Crusius, we are given the opportunity to show what Kant means by *qualitates occultas*, and why Kant thinks that *insofar as the C-criterion is concerned*, Crusius is resorting to *qualitates occultas*. I will not spend a separate chapter to discuss the common-sense theories.

In the *Dynamics* chapter of *Metaphysical Foundations*, Kant contrasts his own explanation of *impenetrability* in terms of repulsive forces with the explanation by *qualitates occultas* as follows:

Absolute impenetrability is in fact nothing more nor less than *qualitas occulta*. For one asks what the cause is for the inability of matters to penetrate one another in their motion, and one receives the answer: because they are impenetrable. The appeal to repulsive force is not subject to this reproach. For, although this force cannot be further explicated in regard to its possibility, and therefore must count as a fundamental force, it does yield a concept of an acting cause, together with its laws, whereby the action, namely, the resistance in the filled space, can be estimated in regard to its degrees. (AA 4:502)

The reproach of *qualitates occultas* is applied to the explanation of the ground of some kind of object's being F. As Kant points out, the answer to the question *why the matters are impenetrable* is *that they are impenetrable*. Therefore, the scheme of occult quality in Kant could be summarized as follows:

Def. occult quality F = for any object x , x is F if and only if (i) x has the quality of F-ness and (ii) x 's being F-ness is unexplainable in other terms.

If the phenomena that x is F is explained in terms other than F, say, G, this mode of explanation does not fall under the category of *qualitas occulta*. Kant further clarifies that it is true even if the explanation that x is G cannot be further explained. Otherwise, the recursivity of the scheme entails the infinite regress of explanation, which is traditionally taken as implausible. The point is not that how long the chain of explanation extends, but the phenomena in question must be given a genuine explanation.

Kant sometimes formulates the objection to *qualitas occulta* in a different manner. According to the *Blomberg Logic*, Kant equates *qualitas occulta* with the fallacy of circular reasoning:

In the writings of the ancient philosophers we quite frequently find such *qualitates occultas*, and in the writings of Crusius they are as frequent as they ever could have been among the ancients. He says, e.g.: something is true because no one regards it as, or can hold it to be, other than true. The one says just as much as the other, thus it is a *qualitas occulta*. (AA 24:82)

Here Kant is saying that the mode of explanation by appeal to *qualitas occulta* commits the logical fallacy of *idem per idem*, namely, the same by the same. For Kant, Crusius suffers from the charge of *qualitas occulta*, because he holds "something is true because no one regards it as, or can hold it to be, other than true" (AA 24:82). Crusius embraces the following scheme: for any proposition p , p is true if p is universally and inevitably thought to be true.

Initially, this criticism does not do justice to Crusius. Facing the question of the ground of truth, Crusius does not fall into the category that "[t]he one says just as much as the other", which Kant construes as the mark of a circular reasoning. Rather, he says that the objective notion of truth must be determined with reference to a universally and necessarily valid criterion for all subjects. Crusius correctly identifies a subjective notion of objective validity. At this point, Crusius makes a move similar to Kant in that both of them are convinced that truth cannot be determined

by transcending the limit of human thought to look at whether the representation is in agreement with its object. In fact, to gain objectivity from subjectivity is what leads one to conflate Kant's position with that of Crusius.

In order for this criticism to take its effect, Kant seems to have to commit to the assumption that it is *trivially true* that *truth implies the intersubjective validity*. This commitment is consistent with Kant's insufficiency objection to Crusius. Subjective certainty is a necessary yet not sufficient condition for truth. Even so, Crusius still does not fit the reproach of *qualitas occulta*, for what he says is *insufficient* and thereby false, rather than *uninformative* and trivially true. Moreover, the C-criterion is not unexplainable. Crusius explicitly identifies God as the ground of truth. Whether that the appeal of God can count a genuine explanation will be discussed in the following.

4.4 Against the Pre-established Harmony

4.4.1 The Intellectual Pre-established Harmony

The C-criterion in general and the inborn concepts and principles in particular are unexplainable only insofar as we do not invoke God to explain innateness. As a common practice, however, the claim that some concepts or principles are *innate* implies the claim that they are *implanted* by God. That is to say, the synthetic *a priori* propositions are inborn principles implanted by God.¹⁴¹

In his 1772 letter to Herz, Kant writes that "Crusius believed in certain implanted rules for the purpose of forming judgments and ready-made concepts that God implanted in the human soul just as they had to be in order to harmonize with things" (AA 10:131). Kant then dubs the label "Pre-established Intellectual Harmony Theory" (AA 10:131) to refer to Crusius' theory that God implants the inborn concepts and principles into human understanding. In somewhere else, Kant views Crusius as "a pre-stabilist of reason" (AA 18:21). Consequently, Kant identifies it as one form of the infamous doctrine of pre-established harmony in general.

In order to appreciate Crusius' intellectual version of pre-established harmony, it is better for us to start with Kant's interpretation of the Leibnizian pre-established harmony. In one explicit discussion of pre-established harmony in the *Amphiboly* Kant writes:

¹⁴¹ The appeal to a divine grounding is only an unavoidable move for Crusius but also a target for Kant's attack. Kant's objection is directed not so much to *the validity of the inference* from being innate to being implanted than to *the nature* of the appeal to divine grounding.

For this very reason, however, his [Leibniz's] principle of the possible **community of substances** among themselves also had to be **predetermined harmony** and could not be a physical influence. For since everything is only internal, i.e., occupied with its own representations, the state of the representations of one substance could not stand in any *efficacious connection* at all with that of another, but some third cause influencing all of them had to make their states correspond to one another, not, to be sure, through occasional assistance specially brought about *in each case* (*systema assistentiae*), but rather through the unity of the idea of *one cause valid for all*, from which, in accordance with general laws, they must all together acquire their existence and persistence, thus also their reciprocal correspondence with each other. (A274-275/B330-331)

In this passage, pre-established or predetermined harmony is applied to the community relation *between substances*. In fact, the system of pre-established harmony is a theory that is designed to account for causation in general, and it is applied to a variety of phenomena, such as mind-body problem, the problem of perception, etc.¹⁴² It must be pointed out that the system of pre-established harmony is only applied to *natural causation in general*, and not to *divine causation*.¹⁴³ In the latter case, Leibniz obviously believes that God *really* causes the world.

It is not difficult to articulate the system of pre-established harmony in the following ways: for anything x and y in the world, x and y stands in the relation of pre-established harmony if and only if (i) x and y are systematically co-varied, (ii) the ways of co-variation of x and y draw *only* on the intrinsic or non-relational properties of x and those of y , and (iii) the intrinsic properties and the individual history therefrom of x and those of y are programmed by God in advance.

By (i) the systematic co-variation pre-established harmony satisfies the requirement of *empirical adequacy*. By (ii) the non-relationality it makes the commitment to *causal idealism*, namely, the causal relation is not real but ideal. And meanwhile, it is distinguished from the system of assistance or occasionalism proposed by Malebranche. By (iii) it makes the commitment to the divine grounding. It offers an account of the source of the constant conjunction by appeal to the pre-determined program of God. To sum up, pre-established harmony claims that the causation between x and y is derived neither from the efficacy of x nor from that of y , but from a *third* thing z , and this third thing z is *infinite*. By appeal to the third thing, the pre-established harmony is committed to *causal idealism*. By appeal to the infinite thing, it is committed to *epistemic theism*.

Then, what does Kant mean by the “Pre-established Intellectual Harmony Theory”? For Leibniz, perceptual and intellectual knowledge is species of the genus of constant and regular relation. Due to the general applicability of the system of pre-established harmony, it comes as no

¹⁴² For the ramifications of the system of pre-established harmony see Watkins 2005.

¹⁴³ In Christian philosophy, divine causation is called primary causation, while natural causation is called secondary causation.

surprise that it could be applied to epistemology. As Leibniz writes in the letter to Arnauld on October 9th in 1687:

One thing expresses another (in my terminology) when there exists a constant and fixed relationship between what can be said of one and of the other. This is the way that a perspectival projection expresses its ground-plane. Expression is common to all forms, and it is a genus of which natural perception, animal sensation, and intellectual knowledge are species. (1967, 144)

Perception and intellectual knowledge are two species of which representation or expression is a genus. Therefore, the intellectual pre-established harmony means pre-established harmony with regard to *intellectual knowledge*. Since what is at issue is innate concepts and principles, in Crusius' philosophy intellectual knowledge concerns nothing but the relationship between innate concepts or principles and objects.

This pre-established harmony verdict is ironical for Crusius, however. Crusius is one of the most adamant opponents to pre-established harmony as well as one of the most fervent supporters of the physical influx, another distinct system designed to explain grounding or causation relation. Crusius not only precludes pre-established harmony from the *mind-body problem*, but also claims that the relations *between corporeal substances* are real, and it is these real relations that combine separate substances into one *whole world*.

Here it is useful to distinguish two different ways of endorsing pre-established harmony. For Leibniz himself, pre-established harmony is a universal doctrine *applied* to all phenomena of natural causation in general. He develops a multiplicity of *general arguments* for the *impossibilities* of its main alternatives of physical influx and occasionalism. Leibniz's followers, by contrast, do not have to adopt Leibniz's general arguments against other systems of explaining causation even if they endorse pre-established harmony for one reason or another. Rather, the system of pre-established harmony is radically *localized* by them for one reason or another. For them, both physical influx and pre-established harmony are systems to explain the phenomena of natural causation. It is perfectly compatible if one resorts to physical influx to explain causation in one subject matter and to pre-established harmony in another.

On Kant's view, Crusius is such a *local* theorist of pre-established harmony. To be sure, Crusius does more than anyone else before Kant to mount criticisms on pre-established harmony and to champion the reality of causal relations and causal powers. Nonetheless, his physical influx metaphysics does not commit him to a physical influx epistemology. In the field of intellectual

knowledge, Crusius rejects *the reality of the relationship* between representation and object. Rather, he attributes the ground of the agreement between representation and object to God, a move that in Kant's view resurrects pre-established harmony.

In my view, Kant's judgment is fair; with regard to intellectual knowledge or *a priori* knowledge, Crusius does commit himself to pre-established harmony. The C-criterion claims that there exists a systematic correspondence between thoughts and things outside of thoughts, thereby it satisfies the condition (i) of pre-established harmony. The correspondence between the series of thoughts and the series of things are not derived from the efficacy of either party, but due to the inner nature of each party, thereby it satisfies the condition (ii). God guarantees the systematic correspondence between thoughts and things outside of thoughts, and therefore it satisfies the condition (iii).

Given the possibility of the permission of pre-established harmony to be an element of this philosophy, one unmistakable difference between Crusius and Kant with respect to pre-established harmony emerges. For Crusius pre-established harmony is false not by itself. Rather, it is false for different specific reasons: it could be objectionable due to its insufficiency to explain certain phenomena of causation; it could also be objectionable due to its incompatibility with other philosophical claims. For Kant, by contrast, pre-established harmony is *false by itself* in addition to specific reasons. Kant's criticisms on pre-established harmony are as general as Leibniz's defenses. Due to his general hostility, Kant is alert and ready to see whether any system would collapse into pre-established harmony. Any attempt to invoke pre-established harmony results in falling prey to the general objection to the pre-established harmony system. This objection is nothing but what Kant says in his Herz letter: "the *deus ex machina* is the greatest absurdity one could hit upon in the determination of the origin and validity of our cognitions" (AA 10:131). Before tackling this general objection, let's first examine Kant's particular objections.

4.4.2 Objections to the "Middle Way"

(a) The Insufficiency Objection

Kant repeatedly characterizes the intellectual pre-established harmony system as a "middle way". This characterization vividly captures the position of Crusius' system in Kant's metaphysical spectrum. The intellectual pre-established harmony steers a middle way precisely because it does not commit to the model of "the object makes the representation possible", nor to the model of "the representation makes the object possible". Kant's discussion of the "middle way" marks an important improvement of Kant's argument. Essentially, this move takes a previously neglected

alternative into account and thereby closes the logical gap in A-Deduction. Therefore, not only could it be viewed as an important, and even indispensable, complementary argument to the A-Deduction, it also changes the landscape of Transcendental Deduction by committing to an entirely new model of grounding that underlies the system of the intellectual pre-established harmony.

In a footnote to §36 of the *Prolegomena* Kant considers the possibility of “a middle way” represented by Crusius for the first time, and he argues as follows:

Crusius alone knew of a middle way: namely that a spirit who can neither err nor deceive originally implanted these natural laws in us. But, since false principles are often mixed in as well – of which this man’s system itself provides not a few examples – then, with the lack of sure criteria for distinguishing an authentic origin from a spurious one, the use of such a principle looks very precarious, since one can never know for sure what the spirit of truth or the father of lies may have put into us. (AA 4:320f)

Kant’s talk about “the father of lies” is reminiscent of the Cartesian evil demon, and it suggests that Kant intends to introduce something that could play a role in the radical skeptical scenario. On my reading, however, by “the father of lies” Kant does not have in mind anything like that. According to the Cartesian radical skepticism, even our belief in obviously true principles might be a result of the deception by the evil demon. This Cartesian radical skeptical scenario is inescapable for Kant.

Kant’s point is rather that even if *all* the inborn principles are believed to be true, it leaves undetermined whether it is the father of lies who deceives us. Kant’s argument rests on his previous objection to the *arbitrariness* of the C-criterion. If *all* the principles implanted in the human mind are true, it follows that it is the spirit of truth who implants them. If there are *some* false principles, it follows that we cannot tell whether it is the father of lies or the spirit of truth who implants them. Given the fact that the C-criterion recruits false principles, it can be inferred from that “false principles are often mixed” that there is a father of lies.

Therefore, it implies that the general role of the planter of all true principles cannot be individuated into the spirit of truth; and the spirit of truth in turn cannot be individuated into God. The previous quotation from the *Prolegomena* suggests that it should have taken Kant an additional argument against that only God can play the role of the spirit of truth that implants the rules into human mind by excluding anything else (angle for instance) who can play the role. In the 1787 *Critique*, however, Kant explicitly identifies “subjective predispositions for thinking” as “implanted in us along with our existence by *our author*” (B167). So in the following, I will leave aside the second worry of individuation and focus on other objections.

(b) The Subjectivity Objection and Causal Realism

A passage on Crusius similar to the above one in the *Prologomena* appears in the *Critique*:

(besides the fact that on such a hypothesis no end can be seen to how far one might drive the presupposition of predetermined predispositions for future judgments) this would be decisive against the supposed middle way: that in such a case the categories would lack the **necessity** that is essential to their concept. For, e.g., *the concept of cause*, which asserts the necessity of a consequent under a presupposed condition, *would be false* if it rested only on a subjective necessity, arbitrarily implanted in us, of combining certain empirical representations according to such a rule of relation. I would not be able to say that the effect is combined with the cause in the object (i.e., necessarily), but only that I am so constituted that I cannot think of this representation otherwise than as so connected; which is precisely what the skeptic wishes most, for then all of our insight through the supposed objective validity of our judgments is nothing but sheer illusion, and there would be no shortage of people who would not concede this subjective necessity (which must be felt) on their own; at least one would not be able to quarrel with anyone about that which merely depends on the way in which his subject is organized. (B167-168)

Many texts in the 1787 *Critique* could find precedents in *Prologomena*, and in most cases the former is merely a repetition of the latter. However, this passage is an exception. While this passage serves also as a criticism against Crusius, it develops an entirely new argument, and Kant even calls it the “most decisive”. This most decisive objection appears to be that “the categories would lack the **necessity** that is essential to their concept”. Kant’s following explication reads: “I would not be able to say that the effect is combined with the cause in the object (i.e., *necessarily*), but only that I am so constituted that I *cannot* think of this representation otherwise than as so connected” (B168). In effect, Kant draws a distinction between two kinds of necessity: objective necessity and subjective necessity. At first, Kant’s reproach of subjective necessity is perplexing; we have been accustomed to the view that Kant’s objectivity is nothing but the necessity initiated by subject. If there is another kind of subjective necessity, the difference between Kant and Crusius seems too nuanced to be detected. As Kant makes it clear, however, the distinction between subject necessity and objective necessity is clear-cut: the former concerns the constitution, or the predisposition, of the human mind, while the latter is *the combination in the object*.

Kant’s objection is that if we adopt the Crusian preformation system, then we would not have *objective representation* at all. Since what is taken under consideration are innate concepts which are *a priori*, it amounts to saying that we would not have *objective a priori concepts*. This is not the only way to understand Kant’s point in his objection. Kant’s objection could make sense without

committing to the premise (2). According to this interpretation, Kant's objection is that the conception of the *innate objective* representation is simply *conceptually incoherent*.

According to the traditional conception of objectivity, a representation *r* is objective iff *r* is correspondent to the object *o* outside *r*. According to this conception of objectivity, it is unobjectionable that the Crusian innate concepts and principles are objective. However, Kant rejects such a traditional conception of objectivity in favor of a new and stronger conception of objectivity: an *a priori* representation *r* is objective if and only if (i) it is instantiated in experience, and (ii) its instantiation is *really grounded* on the *a priori* representation in question.

It becomes apparent that the parallelism or isomorphism in the agreement is too weak to be adequate for objectivity, so Kant introduces new conditions to modify the old conception of the objectivity of representation. The new condition (ii) is a requirement of Kant's assumption of explanatory rationalism, which is intended to forestall the occult quality objection, which is the *innate version* of the Crusian system. For Kant, a purely contingent agreement cannot yield objectivity at all.

The condition (ii) not only says that there should be a ground but also says that the ground should be real. Therefore, it betrays that in addition to the explanatory rationalism, the *causal realism* is also brought in play in his conception of objectivity. According to causal realism, a ground *g* is real if and only if *g* is non-ideal, that is, non-reductive.¹⁴⁴ For instance, in a series of causal events, *a* causes *b*, and *b* causes *c*, then *a* is an *ideal cause* of *c*. In the example, *a* does not really cause *c*, for it could be reduced into two causal events that *a* causes *b* and that *b* causes *c*.¹⁴⁵ Likewise, the *common cause model* falls short of constituting real grounding between the two parallel series. The consequence of Kant's causal realism is profound. It does not only preclude the purely contingent agreement between two things. It also excludes a kind of hypothetically necessary agreement. Therefore, both the innateness version and implantation version of the Crusian system are rejected.

Kant observes that the Crusian preformation system converges with *skepticism*. This remark is surprising. As is well known, skepticism is Kant's standard label on Hume. As a classical rationalist, Crusius insists that *a priori* concepts are innate and implanted by God. As a classical empiricist, by contrast, Hume believes that all concepts are derived from experience. The difference between a classical rationalist and a classical empiricist is even huger than their difference from Kant. How should we make sense of Kant's charge of skepticism? Here Kant explains the derivation of *a priori* concepts from experience in terms of "from a subjective necessity arisen from

¹⁴⁴ For Leibniz's notion of ideality as reductivity see Langton 1998.

¹⁴⁵ Leibniz discusses the conception of *ideal influence* in his *The Monadology*. See Leibniz 1989, 219.

frequent association in experience, which is subsequently falsely held to be objective, i.e., custom” (B127). While for nativist the subjective necessity is endowed by God, for empiricist subjective necessity is acquired by frequent association.¹⁴⁶ It is clear that for Kant what Hume and Crusius have in common is the fact that both of them could only reach subjective necessity. Subjective necessity is simply a matter of how mind behaves without reference to how the objects are and how they could be related to the mental representations. What is at play in Kant’s criticism is still Kant’s characteristic conception of objectivity.

4.4.3 The Crusian Circularity and its Reply

In the 1772 Herz letter, Kant’s mention “the vicious circularity (dem betrüglichen Zirkel)” (AA 10:131) seems to encourage us to suppose that Kant explicitly raises an epistemic circularity objection to Crusius, which is reminiscent of the famous Cartesian circularity. The circular reasoning in Crusius can be summarized as follows:

- (1) I know that (P) the C-criterion is true only if I know that (Q) God exists.
- (2) I know that (Q) God exists only if I know that (P) the C-criterion is true.

Since we can know neither the truth of (P) nor that of Q, this circularity seems to be nothing but the very kind of the famous Cartesian circularity. If one wants to get rid of the alleged circularity, he would reject either (1) or (2). On my view, Crusius could discard (1) in favor of (2). In other words, there is a way for Crusius to justify (2) without invoking (1). The primary difficulty in justifying (2) is that the C-criterion functions as the supreme principle valid of all truths such that the vindication of the C-criterion is almost impossible. In the following, I will outline a strategy to get rid of the epistemic circularity. On my proposal, Crusius would have not squarely committed to the epistemic circularity had he (i) restricted the scope of the C-criterion into material principles in metaphysics and (ii) admitted the logical validity of the ontological argument of God. The basic idea is that Crusius could analytically prove that God implants the C-criterion into us.

Before I delve into the suggested line of response, I would like to remind the readers of the following two facts. First, Crusius has a less humble goal and more resources to deal with the

¹⁴⁶ The acquired subjective necessity might be inferior to the implanted subjective necessity since the former as a naturally evolved and acquired mechanism can err, while the latter cannot. However, this point is not what is at issue right now.

epistemic circularity than Descartes does, and thereby he does not have to confine himself to the Cartesian framework and to take the standard routes suggested by scholars in response to the epistemic circularity. Unlike Descartes, Crusius is not preoccupied with the radical skeptical scenario. The assumption of this strategy is that analytic knowledge is epistemically reliable, and the principle of contradiction is not cast into doubt. Therefore, I will develop one response to the circularity by drawing resources available to Crusius. Second, that Crusius is *able* to discharge the possible circularity objection does not imply that he is *willing* to do so. Unfortunately, it turns out that not all available resources are valued by Crusius. As we shall see, both of the steps (i) and (ii) are explicitly rejected by Crusius. In other words, Crusius cannot get rid of the trap unless he changes his attitudes on certain crucial points. Nonetheless, I believe that it is of interest to know whether Crusius *could* avoid the circularity charge.

For (i): The most important reason for Crusius to be involved in epistemic circularity lies in that he is reviving a Cartesian-style epistemological monism of the criterion of truth. Descartes does not have knowledge about the Leibnizian distinction between the truth of reason and the truth of fact, or the Kantian distinction between analytic and synthetic judgment. Descartes' move is to bring all necessary truths, no matter whether they are analytic or synthetic, categorical or hypothetical, under the category of the *eternal truth* created by God. Descartes believes that the eternal truths can be clearly and distinctly perceived by us, though they do not exhaust all that is clearly and distinctly perceived by us. According to Crusius, the C-criterion as the highest principle is valid to both formal principles and material ones, viz. to both analytic and synthetic *a priori* ones. In placing the C-criterion as the supreme principle of metaphysics, Crusius is subordinating *the Leibnizian dichotomy* between the truth of reason and the truth of fact to *the Cartesian monist* criterion of truth.

With the Leibnizian dichotomy at his disposal, Crusius takes over the distinction between the truth of fact and the truth of reason and couches it in terms of material and formal principles as fundamental to his metaphysics. Meanwhile, Crusius does not have to abandon the crucial distinction between material and formal principles in metaphysics in favor of Wolffian monism as he does in fact. Rather, he could retain his central insight to the requirement of the criterion of truth as well as the formal-material distinction while restricting the scope of the C-criterion merely into the material principle unexplainable with reference to the principle of contradiction. In so

doing Crusius is left adequate room to prove the existence of neither erring nor deceiving God without the help of the C-criterion.¹⁴⁷

For (ii): The restriction of the C-criterion only leaves the necessary room for Crusius to avoid the Cartesian circularity, yet it is far from a sufficient condition for it. In addition, Crusius must be *willing and able* to give an *a priori* ontological argument for the existence of God. The proof of the existence of God is either *a priori* or *a posteriori*. From Leibniz onwards, the notion of *a priori* becomes co-extensive with the analytic when it is applied to proof. In other words, the proof of God can be analytic or non-analytic. According to the Cartesian tradition of ontological proof, the argument for the existence of God is nothing other than an *analysis* of the concept of God *defined* as the most perfect being.

According to the standard ontological argument, the existence of God is logically entailed by the existence of God: if God exists, then his existence is necessary. From the claim of the necessary existence of God, it follows that the omnipotence and omnibenevolence of God are not merely in thought, but in reality. The omnipotence of God implies that God cannot err, and the omnibenevolence of God implies that God cannot deceive. Therefore, a successful ontological God logically entails a non-erring and non-deceiving God, which is precisely required for response to the circularity charge.

Unfortunately, Crusius is no less an opponent to the *a priori* argument for the existence of God than Kant. Crusius thinks that “the actuality of God can be cognized in no way other than from his works”, and thus he discards the *a priori* argument in favor of the *a posteriori* ones for the existence of God. Crusius explicitly charges that the ontological argument is not formally valid:

This inference can be deceptive because the first premise is an axiom, while the second is a definition. However, its form is not correct, as it is a syllogism with four terms. For the term of having existence means something different in the conclusion from what it means in the premise. For it means **existence in the understanding** in the premise, since, namely, a concept in the understanding contains existence in itself in such fashion that when it is thought or posited, existence must also be thought or posited as a part of it. But in the conclusion it means real existence outside of thought.¹⁴⁸

According to Crusius, the ontological argument commits the logical fallacy of four terms. The equivocation of the middle terms is as follows: in the premise the concept of existence means

¹⁴⁷ Again, it reflects the distinction between Descartes and Leibniz in regard to *the status of logic*. This distinction in turn comes down to their difference in understanding *the status of God*.

¹⁴⁸ Watkins 2009, 168.

the ideal existence in thought, whereas in the conclusion it means the real existence outside of thought. If ontological argument is invalid, Crusius can only turn to the *a posteriori* arguments for help. However, it is not clear that any successful *a posteriori* arguments will imply the omnipotence and omnibenevolence of God. In this case, a vicious circularity reemerges. Thus, Kant's verdict is fair: we cannot know for sure that God exists and He neither deceives nor errs.

Kant's argument against the necessary existence of God by logical entailment from its concept has received wide acclaim. Recently Nick Stang has argued that an adequately sophisticated rationalist (Baumgarten for instance) is able to provide an ontological argument that immunes from Kant's allegedly successful refutation.¹⁴⁹ Whether there is a successful ontological argument is not my present concern here. For the sake of argument, let's suppose that there is such an argument and that Crusius is convinced by it. By restricting the C-criterion and adopting such an argument, Crusius could establish the existence of the non-erring and non-deceiving God without being bogged in vicious circularity. Since we know that God exists independently of the C-criterion, then (1) is falsified, and thereby the circularity disappears.

4.4.4 The *Deus ex Machina* Objection and Epistemic Atheism

In the original context, Kant mounts his objection against both hyperphysical influx and pre-established harmony. In the last chapter I have analyzed why the system of intellectual intuition is hopeless, now I will turn to the *Deus ex machina* objection to pre-established harmony. As I have noted, Kant's *Deus ex machina* objection is more directed at pre-established harmony in general than to Crusius' preformation-system in particular. In other words, it is not that preformation system *per se* is false. Rather, pre-established harmony is false, and preformation system as one *species* of pre-established harmony is thereby false.

Kant's *Deus ex machina* objection to Crusius' system of pre-established harmony between representation and object is not a new invention. It echoes the same famous objection made by Leibniz against Malebranche's occasionalism of natural causation, according to which God is invoked to intervene the world from moment to moment for each state of the world. In his first published essay *New System of Nature* composed in 1695, Leibniz introduces his *Deus ex machina* charge as follows:

¹⁴⁹ See Stang 2015.

It is quite true that, speaking with metaphysical rigor, there is no real influence of one created substance on another, and that all things, with all their reality, are continually produced by the power [*vertu*] of God. But in solving problems it is not sufficient to make use of the general cause and to invoke what is called a *Deus ex machina*. For when one does that without giving any other explanation derived from the order of secondary causes, it is, properly speaking, having recourse to miracle. (1989, 143)

As the passage indicates, Leibniz's mention of miracle might allude to his perpetual miracle argument, one of Leibniz's most famous objections to occasionalism. According to this argument, the occasionalist account of natural causation by appeal to a *supernatural cause* amounts to saying that God exercises a perpetual miracle on the world, for all the natural events are miraculous in the sense that all events exceed their own causal powers. Thereby it implies there is no genuine distinction that can be drawn between laws of nature and miracle.¹⁵⁰

In this very passage, however, it is not the specific consequence of perpetual miracle, but a general mode of explanation of *Deus ex machina*, that constitutes the chief target under Leibniz's attack. Here Leibniz employs *Deus ex machina* to highlight a particular pattern of inference that underlies the system of occasionalism. According to Leibniz, an explanation invokes God as *Deus ex machina* if the explanation invokes God by making use of God as the general cause without giving an explanation from other secondary cause. On the one hand, Leibniz is convinced that God should play a role in the explanation of natural phenomena to display his divine wisdom and benevolence. On the other hand, he believes that we cannot simply invoke God as the immediate cause and thereby ignores the complex mechanism in nature as the secondary cause. It is by specifying which causal role God plays that Leibniz distinguishes the illegitimate invocations to God as *Deus ex machina* from the legitimate ones. Different from the perpetual argument, what Leibniz does here is to make a normative claim on epistemic legitimacy: what kind of explanation is legitimate if it invokes to God.

The charge of invoking *Deus ex machina* seems applicable to Leibniz's own system, too. It does appear puzzling to his contemporaries that Leibniz feels his own theory of pre-established harmony free from this charge, since it also makes an appeal to God. In his letter to Leibniz on March 4th in 1687, Arnauld expresses his worry that Leibniz's system of pre-established harmony seems "saying the same thing in other words that those claim that my will is the occasional cause of the movement of my arm and that God is the real cause of it".¹⁵¹

¹⁵⁰ For Leibniz on perpetual miracle see Adams 1994, 90-99.

¹⁵¹ Leibniz 1967, 105.

Anticipated by Arnauld's scruple, it is not surprising to hear that Kant charges Crusius' intellectual pre-established harmony with invoking God as *Deus ex machina*. However, the intellectual pre-established harmony does not fall prey to the *Deus ex machina* objection only if the notion of *Deus ex machina* is captured precisely as Leibniz explains. With the well-defined notion of *Deus ex machina* in hand, however, Leibniz could easily distance his pre-established harmony from occasionalism and dismiss the latter as explanatorily illegitimate by taking God as the general cause.¹⁵²

As we have seen, the distinction between God's role as ultimate cause and his role as immediate cause matters so much for Leibniz. In spite of that, the distinction is not that significant for Kant. Kant's entire *Deus ex machina* objections rests upon his dismissal of the distinction. For Kant Malebranche's system of assistance and Leibniz's system of pre-determined harmony are close neighbors. Indeed, Kant calls them respectively as individually established harmony and generally established harmony in his *Inaugural Dissertation*. (AA 2:409) Since Kant radicalizes the notion of *Deus ex machina*, to decide whether some explanation is susceptible to the *Deus ex machina* objection is not a matter to see whether God plays the explanatory role as immediate cause or as remote cause, but a matter to see whether God plays any explanatory role regardless of what role it is. To invoke God as *Deus ex machina* is simply to accord it some role in the explanation of natural phenomena. Consequently, *any mode of the explanation of a priori knowledge* by appeal to God invites this kind of objection. In this sense, Leibniz's system of pre-determined harmony is no better off than Malebranche's system of assistance.

Kant's reconceptualization of *Deus ex machina* should not obscure its continuity with Leibniz's original conception; their difference is a matter of degree. Both of them employ this objection as a charge to the legitimacy of the mode of explanation, and both of them impose demands on theoretical norms. In fact, Leibniz and Kant can be regarded as working in the same direction. Leibniz takes the step to deprive God of the immediate or secondary cause of the explanation of natural phenomena. Kant takes a further step to deprive God of any role in the explanation of knowledge.¹⁵³

¹⁵² For Leibniz's motivation and effort to distance his own pre-established harmony from perpetual miracle see Rutherford 1993, 135-159. For a different account see Jolley 1998.

¹⁵³ It is not obvious whether this objection can be extended to the explanation of *any phenomena*. Again, it might be illuminated to see whether Kant has ever resorted to God in his philosophy. It is noteworthy that pre-critical Kant does resort to God in their explanation of the origin of the real connections between isolated substances. One natural question is whether a complete theory of physical influx also invites the *Deus ex machina* objection. Then, the only two alternatives we have are either to bite the bullet to say that pre-critical Kant leaves himself open this objection, or to draw a line of the legitimate appeal to God such that Kant's objection is not to be applied to himself. One simple answer is that the appeal to God is merely a dogmatic residue of the pre-critical Kant, which is discarded in his critical philosophy. Therefore, there is no inconsistency in Kant's epistemic atheism.

As I have noted, the *Deus ex machina* objection is directed to a wide range of positions. In particular, Kant claims explicitly that the *Deus ex machina* objection is also applied to intellectual intuition. The move to invoke intellectual intuition is also one that makes an appeal to God. In this case, God does not play the role of the guarantor of the parallelism between thoughts and objects outside thoughts. God instead plays the role of the creator and giver of the objects of *a priori* knowledge. The C-criterion of truth is reliable because it is guaranteed by God. The object of *a priori* knowledge is available because it is provided by God.

The explanatory schema of *Deus ex machina* can be formulated as follows: something *x* is *F* for *God wills or makes it*. It is reminiscent of Kant's objection to the appeal to occult qualities in explanation: something *x* is *F* for *x has an occult quality of F-ness*. The system of occult quality does not constitute a genuine explanation, since it does not explain its explanandum *in other terms*. While pre-established harmony seems to explain its explanandum in other terms, it makes an appeal to an infinite cause that could explain everything. Both systems of explanation could explain everything in an effortless way by appealing to the omnipotent scheme. It is no wonder that both invite intellectual laziness.

With this schema one simply cannot tell a good explanation from a bad one since everything could be explained in such a way. It is less an argument than an implicit assertion of what counts as the *legitimate mode of explanation*. The recourse to God makes philosophy as human intellectual endeavor *less rewarding*. In effect, the *Deus ex machina* objection is an objection to triviality. In sum, the problem of the inference to the explanation by God is that the scheme is *too general to be explanatorily informative* and it is *too cheap to be explanatorily profitable*.

Initially, it appears not to be a fatal objection. The objection seems to be *normative* in character. It excludes the mode of inference to explanation by God neither due to its *falsity*, nor due to its *incoherence*, but due to its *triviality*, which is obviously not a *theoretical virtue*. The system of pre-established harmony could be a true story; we cannot preclude the possibility that it is the case that the relation of representation to object is subject to a system of pre-established intellectual harmony.

Underlying the objection is one of Kant's most fundamental assumptions, *epistemic atheism*. Epistemic atheism claims that God does not play any role in explaining the possibility of knowledge. It is noteworthy that epistemic atheism should be distinguished from other kinds of theism, which are more famous in philosophical literature. *Metaphysical theism* is the view that God exists, a view most philosophers and scientists assume.¹⁵⁴ *Moral theism* is the view that God plays some role in

¹⁵⁴ The stronger versions of metaphysical theism hold that God creates the world or lays down laws of nature to the world.

explaining the possibility of morality, a view Kant himself defends in his ethics. One should be wary of the complex relationship between various kinds of theism and atheism. Both epistemic theism and moral theism presuppose metaphysical theism. However, epistemic atheism is independent of other kinds of atheism. It does not imply metaphysical theism; neither does it imply moral atheism. Meanwhile, epistemic atheism is compatible with metaphysical theism and moral theism; Kant himself is an example of embracing these three positions.

It is fair to say that epistemic theism is the dominant view in early modern philosophy. The spectrum of epistemic theism ranges widely, and it includes *Christianized Platonism*, *divine illumination*, *divine reliabilism*, and *divine perspectivism*. On Kant's interpretation, Plato and Malebranche embrace the Christianized Platonism that God creates *objects* for our *a priori* knowledge, accompanied by the commitment to the *realism of abstract objects*. Augustine and his followers endorse the doctrine of divine illumination, according to which all of our ideas are located in God.¹⁵⁵ Descartes embraces the doctrine of divine reliabilism, according to which God guarantees our epistemic apparatus such that we could perceive clearly and distinctly.¹⁵⁶ Even Spinoza's pantheism is no exception. On this issue, Spinozism could be dubbed as divine perspectivism, according to which we human beings could represent adequate ideas *from a God's point of view*.

The only exceptions to this dominant tradition before Kant are British empiricists Locke and Hume.¹⁵⁷ Obviously, Kant aligns himself with this tradition.¹⁵⁸ Epistemic atheism delineates the boundary of *explanatory legitimacy*. In Chapter 5 we will see that empiricist philosophy still occupies one horn of *the new dilemma* of relation problem. It is not only because that the borrowing model of the knowledge of empirical path can yield the same scope of knowledge independently of the metaphysical status of physical objects; it is also because the explanatory legitimacy implied by epistemic atheism makes empiricism the most viable position in the philosophical spectrum.

The rivalry between the empirical path, the mystical fanatical path, and the logical fanatical path under discussion results from the two seemingly mutually conflicting desiderata: *explanatory legitimacy* and *explanatory adequacy*. However, none of the three paths could satisfy both desiderata at the same time. The empirical path satisfies the former; it is explanatorily legitimate yet not explanatorily adequate. On the contrary, the two fanatical paths satisfy the latter; they are

¹⁵⁵ The Christianized Platonism should not be conflated with the divine illumination since the former merely adds the origin of abstract entities.

¹⁵⁶ See Jolley 1998.

¹⁵⁷ Hobbes could be classified as an epistemic atheist. Hobbes is rather skeptical of the Christian theist outlook, though he recognizes the existence of God. However, Hobbes certainly does not exert great influence on Kant's theoretical philosophy.

¹⁵⁸ In addition to Kant, one philosophical school that is devoted to developing this aspect of Locke's philosophy is French materialism.

explanatorily adequate yet not explanatorily legitimate. One central motivation of Kant's transcendental path is to develop a theory possessing the theoretical virtues of both explanatory legitimacy and explanatory adequacy.

Chapter 5 Toward the Transcendental Path

5.1 Introduction

For many readers, Kant creates the impression in the *Critique* that for vindicating the transcendental path, everything is done as soon as he rejects the empirical path. However, it is desperately incomplete. In the above chapters, it takes us a long journey to examine the empirical path, the mystical fanatical path, and the logical fanatical path by taking into account what each system says and how Kant argues against them. In spite of their systematic importance, Kant does not incorporate the entire journey into his *magnum opus*, *Critique of Pure Reason*.

In the Herz letter, we have seen how unsolvable Kant finds the puzzle is. In the *Critique*, the difficulty that plagues Kant suddenly disappears. Then, one might reasonably conclude that by 1781 Kant had found a solution to the previous system. As we have noted, it seems all possible paths based on different grounding models have been exhausted, and no further possible room is left to Kant. Then, what is Kant's solution to his puzzle?

In section 5.2, I will argue that the previously considered paths do not exhaust all the possible paths, and Kant finds that there are two sub-models within the model of "the representation makes the object possible". Kant's discussions of abstract, mathematical, and moral objects assume that to make possible is to *make actual*. However, Kant shows that to *make determinate* is the other way to make possible. I will continue to argue that to say some objects are determined *a priori* is to say that some objects instantiate necessary properties.

In section 5.3, I will offer an analysis of the consequences of Kant's notion of "determining *a priori*" and his Copernican model of grounding, and I will argue that the idealization of objects, the schematization of categories and the radicalization of imaginative synthesis constitute the separately necessary yet jointly sufficient conditions of the model of "making determinate". And then I will briefly discuss what costs Kant as well as what benefits him for taking the transcendental path.

In section 5.4, I will examine two kinds of arguments for idealism without any reference to the notion of sensibility. The first argument from the objective reality of categories could be viewed as an argument for supplying the necessary condition of idealism for the Copernican model of grounding. The second argument from laws of nature is a line of argument for idealism that is entirely different from any argument offered in the Aesthetic. The underlying basic idea of the ontological degeneration in a metaphysical hierarchy marks a radicalization of the idea that we resemble God to the distinctive Kantian idea that we replace God.

In section 5.5, I will propose that schemata are the instances of the categories in experience, and therefore they are the necessary properties of the empirical objects. I will also suggest that the schemata are introduced because the nature of the objects is changed so that the nature of their properties is changed. On a final analysis, I will suggest that there is a tension between Kant's two specifications of schemata, and it can be resolved only when we note the systematic ambiguity in Kant's notion of relation or application.

In section 5.6, I will argue that the *a priori* determination requires a determining ground and I will identify the ground with the transcendental synthesis of imagination. And then I proceed to analyze the various requirements imposed by the determining ground and to show how transcendental imagination fills the role in virtue of its productivity, transcendental, and blindness. Finally, I propose that by insisting on the priority of synthesis, Kant's picture of mind decisively departs from those analysis-centered conceptions of mind embraced by his rationalist predecessors and contemporaries.

5.2 The Transcendental Path and *A Priori* Determination

5.2.1 the Disappearance of the Difficulty

Remember that in the 1772 letter to Herz Kant wrote that "our understanding, through its representations, is neither the cause of the object (save in the case of moral ends), nor is the object the cause of our intellectual representations in the real sense (*in sensu reali*)" (AA 10:131). This is precisely the difficulty on which Kant gets stuck in the Herz letter. In *Critique*, however, the difficulty suddenly and curiously disappears. Kant no longer finds there is anything problematic with the way of the reference of *a priori* concepts of understanding to objects. In the introductory section "Transition to the transcendental deduction of the categories" claims that synthetic *representation can make object possible in virtue of a priori determination*:

There are only two possible cases in which synthetic representation and its objects can come together, necessarily relate to each other, and, as it were, meet each other: Either if the object alone makes the representation possible, or if the representation alone makes the object possible. If it is the first, then this relation is only empirical, and the representation is never possible *a priori*. And this is the case with appearance in respect of that in it which belongs to sensation. But if it is the second, then[...] the representation is still determinant of the object *a priori*[...]. (A92/B124-125)

It is noteworthy that it is What stands in contrast with the empirical path and stands for the model of “the representation makes the object possible”. In concluding §27 “the Result of this deduction” of 1787 *Critique* Kant puts the new dilemma in a very specific and explicit way:

there are only two ways in which a **necessary** agreement of experience with the concepts of its objects can be thought: either the experience makes these concepts possible or these concepts make the experience possible. The first is not the case with the categories (nor with pure sensible intuition); for they are *a priori* concepts, hence independent of experience (the assertion of an empirical origin would be a sort of *generatio aequivoca*). Consequently only the second way remains (as it were a system of the **epigenesis** of pure reason): namely that the categories contain the grounds of the possibility of all experience in general from the side of the understanding. (B166-167)

The new dilemma is formulated as “either the experience makes these concepts possible or these concepts make the experience possible”. On the one hand, Kant talks about “categories” or “*a priori* concepts” in particular without talking about representation in general. On the other hand, Kant explicitly identifies the object as “experience” and he informs the general claim that the *a priori* representation determines the object with a more specific articulation that “the categories contain the grounds of the possibility of all experience in general”.

What is stunning in this new formulation of the grounding dilemma is that Kant claims that the *a priori* concepts of understanding fall under the horn that “the representation makes the object possible”, which should have been successfully rejected by Kant as the mystical fanatical path. In fact, this is precisely what the principle of transcendental deduction says: “they must be recognized as *a priori* conditions of the possibility of experiences (whether of the intuition that is encountered in them, or of the thinking)” (A94/B126).

5.2.2 The Generality of “Representation Makes Object Possible”

The secret of the disappearance of the difficulty lies precisely in that Kant becomes aware that creation or invention is by no means the *only* way in which the representation makes the object possible. It might be a little surprising that for Kant the mode of “the representation makes the object possible” ranges widely. Kant holds that there are three cases in which the representation makes the object possible. Representations can make possible (a) *abstract objects*, (b) *mathematical objects*, and (c) *moral objects*. All of them are included in the Herz letter:

if that in us which we call “representation” were active with regard to the object, that is, if the object itself were created by the representation (as when divine cognitions are conceived as the *archetypes of things*), the conformity of these representations to their objects could also be understood. (AA 10:130)

our understanding, through its representations, is neither the cause of the object (save in the case of *moral ends*)[.] (AA 10:130)

In mathematics this is possible, because the objects before us are quantities and can be represented as quantities only because it is possible for us to produce their *mathematical representations* (by taking numerical units a given number of times). (AA 10:131)

The above three cases pertain to two distinct kinds of mind. The Platonic abstract objects can be made possible by the divine mind, whereas only mathematical objects and moral objects can be made possible by the representation of the human mind. Despite the insurmountable gap between divine and the human mind, underlying the three different kinds of objects exists *only one model* for representation to make object possible: the representation makes the object possible insofar as *the existence of the object* is concerned.

In the Herz letter, Kant seems to think that the moral object is a species of Platonic objects. After Kant writes that “Plato assumed a previous intuition of divinity as the primary source of the pure concepts of the understanding and of first principles” (AA 10:131), he continues that “[v]arious moralists have accepted precisely *this view* with respect to basic moral laws” (AA 10:131). That is to say, moral laws as moral objects are created as archetypes are.

That mathematical objects are invented or constructed is one of Kant’s most persistent views. In *Critique* Kant writes that “in synthetic judgments we cognize *a priori*... about the shapes that the productive imagination draws in [space in general]” (A157/B196). In discussing the distinction between mathematical principles and dynamical principles, Kant writes: “[t]hings must be entirely different with those principles that are to bring the existence of appearances under rules *a priori*. For, since this existence cannot be constructed, these principles can concern only the relation of existence.”(B 222) It implies that the existence concerned by mathematical principles can be constructed.

5.2.3 Making-Possible as Determining *A Priori*

Then, what is the other way that the representation makes the object possible? In *Critique*, As Kant writes in Transition:

There are only two possible cases in which synthetic representation and its objects can come together, necessarily relate to each other, and, as it were, meet each other: Either if the object alone makes the representation possible, or if the representation alone makes the object possible. If it is the first, then this relation is only empirical, and the representation is never possible *a priori*. And this is the case with appearance in respect of that in it which belongs to sensation. But if it is the second, then since representation in itself (for we are not here talking about its causality by means of the will) does not produce its object as far as its **existence** is concerned, the representation is still determinant of the object *a priori* if it is possible through it alone to **cognize something as an object**. (A93/B124-125)

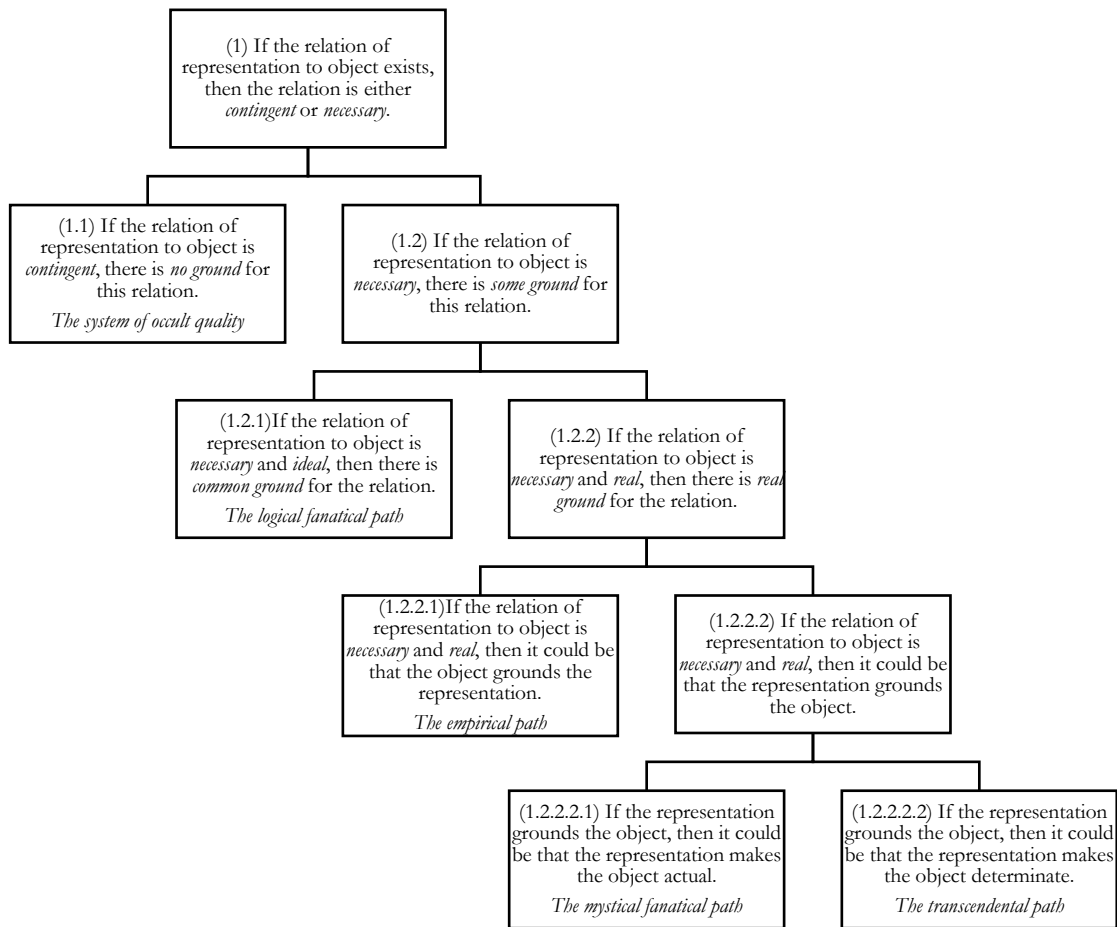
This quotation seems to contain an implicit contrast between two kinds of “representation makes object possible”. The locution “causality by means of will” alludes to the way in which moral objects are made possible by *a priori* representation. In the Preface to the 1787 *Critique*, by contrast, Kant explicitly contrasts the two fundamentally different ways of making possible:

Insofar as there is to be reason in these sciences, something in them must be cognized *a priori*, and this cognition can relate to its object in either of two ways, either merely **determining** the object and its concept (which must be given from elsewhere), or else also **making** the **object** actual. The former is theoretical, the latter practical cognition of reason. In both the pure part, the part in which reason determines is object wholly *a priori*, must be expounded all by itself, however much or little it may contain, and that part that comes from other sources must not be mixed up with it. (Biv-Bv)

Nowhere else Kant makes the two modes of making-possible clearer. In the case of *a priori* reference¹⁵⁹ of representation to its object, two ways of relating representation to its object are available. One is that representation **makes actual** the object, while the other is representation **determines** the object. The former case pertains practical reason, whereas the latter case to theoretical reason.

Therefore, the previous philosophical spectrum depicted in Chapter 1 is complete. It fails to take into account the case that making-actual is not the only way for a representation to make an object possible. The consideration is not as easy as it might initially appear. To make this move means a fundamental break with the intuitive realistic metaphysics, which is deeply embedded in our world-view. Even those idealists are still committed to a metaphysical realism in a more covert way. This is precisely why Kant dismisses the empirical idealists as transcendental realists: a simple mind-dependence account of existence is cheap, but an *a priori* determining theory of causation is difficult. The Picture 1 presented in Chapter 1 could be replaced by the following Picture 2:

¹⁵⁹ *A priori* reference means that the ground of relation is *a priori*.



Picture 2

5.2.4 Formulation of *A Priori* Determination

(a) To Determine an Object

In the following, I will clarify what it means by “determine an object” in general and what it means by “determine an object *a priori*” in particular. And then we will see how this move is *necessary*. As for the first question, I propose that *to determine an object is to add new determinations to it*, and that *to add new determinations to an object is to make it instantiate certain properties*. The notion of “determine” is a technical term in metaphysics, and its meaning should be understood in German metaphysical tradition. In §34 of his *Metaphysics*, Baumgarten writes:

Something is **determinate** if it is posited that it is A or that it is not A, but if it is posited only that it is either A or not A, it is indeterminate. Or, if nothing with respect to contradictory predicates is

posited in the subject except that one or the other is attributed to it, that subject is indeterminate in respect of those predicates. However, it is determinate, if one of them is posited in the subject. Whatever can be determined is determinable. Therefore, concerning this it can be posited that something is A or that something is not A, [hence] that something is determinable.¹⁶⁰

In Baumgarten's formulation, the notion of determination is relational. We can formulate determination in this way: for anything x , x is determined with respect to F if and only if x instantiate the predicate A or its contradictory predicate $\text{not-}A$, where F is a higher-order predicate of A . For example, when we say something a is scarlet, then we are saying that a is determined with respect to red, and we can also say that a is determined with respect to color.

In my view, this how Kant himself understands "determinate" and "indeterminate". In *Transcendental Dialectic*, Kant writes:

Every **concept**, in regard to what is not contained in it, is indeterminate, and stands under the principle of **determinability**: that of **every two** contradictorily opposed predicates only one can apply to it, which rests on the principle of contradiction C and hence is a merely logical principle, which abstracts from every content of cognition, and has in view nothing but the logical form of cognition. (A571/B579)

To be sure, it appears that what Kant speaks of is about the determination of *concept*, rather than about the determination of *thing*. Remember Kant's modal principle that the logical possibility does not imply the real possibility, while the real possibility implies the logical possibility, where the logical possibility is understood as the possibility of a concept, and the real possibility as the possibility of a thing. From the fact that the logical possibility entails the principle of determinability, it follows that the real possibility entails the principle of determinability, in spite of its logical nature.

In fact, Kant is clear about the inference because this is what Kant actually says in the immediately following paragraph: "Every **thing**, however, as to its possibility, *further* stands under the principle of **thoroughgoing determination**" (A571/B579). As a result, the possibility of s thing must stand under *both* the principle of determinability *and* the principle of thoroughgoing determination.

To make an object actual and to determine an object are entirely different. To make an object *actual* is to bring the object into existence. To make an object determinate is to confer property to

¹⁶⁰Watkins 2009, 93-94. For determining ground and external determination see respectively §34 (Watkins 2009, 94) and §36 (Watkins 2009, 94). Baumgarten writes: "[t]hose things that are posited in something in determining [it] (marks and predicates) are determinations" (Watkins 2009, 94).

an existent object. The former is a claim about existence, while the latter is a claim about property. The intuition of the difference between a claim on existence and a claim on property is made even sharper by Kant's famous motto "existence is not a real predicate". For the rationalist such as Baumgarten, existence is complete determination. For Kant, by contrast, existence cannot be analyzed in terms of determination. No matter how determinate an object is made, it can never be made actual in virtue of being made determinate. Put in contemporary locution, for Kant existence is a second-order property, which should not be lumped together with the normal first-order property.¹⁶¹

(b) Determine *A Priori*

In the following exploration of the meaning of the claim "pure concepts determine objects *a priori*", I propose that *to determine a priori is to instantiate necessary property*. For illustrative purpose, the meaning of *a priori* determination could be elucidated by an analogy to Kant's relevant account of pure intuitions, i.e. space and time. This move requires little justification. In fact, in the quotation from B-Preface Kant is speaking of the generic term "cognition", rather than the specific term 'concept' or 'intuition'. It suggests that an analogous reading of the *a priori* determination of intuition could shed light on the reading of the *a priori* determination of concept. Kant's analogy between concept and intuition invites the suggestion that there should be an unequivocal meaning of *a priori* determination.

In Aesthetic Kant makes two *a priori* claims on space and time respectively:

If I can say *a priori*: (T1)*all outer appearances are in space and determined a priori according to the relations of space*, so from the principle of inner sense I can say entirely generally: (T2)*all appearances in general, i.e., all objects of the senses, are in time, and necessarily stand in relations of time.* (A34/B51)

While this passage contains an analogy of space to illustrate time, what is said of time can certainly clarify the nature of space. Therefore, we can sharpen our understanding of *a priori* determination with the help of the mutual reference between space and time. First of all, we can easily infer that *a priori determined* means *necessarily determined*. This is consistent with the meaning of

¹⁶¹ Another vocabulary employed by Kant is the notion of positing. For a discussion on the absolute and relative positing in Kant see Stang 2016.

a priori. What Kant makes here is a *de re* claim that outer appearances necessarily stand in the relation of space. In other words, the spatial relation is *the necessary property* of outer appearances.

Second, the *a priori* determination is valid of *all* objects in a certain domain. Since for Kant necessity and universality are coextensive, the claim that any object x in the domain D is *a priori* determined with respect to some property F means that F is *universally* valid of the domain of any object x in question.¹⁶²

Third, the *a priori* determination of a domain of objects is *the highest-order property*. It is worth noting that the determination in general implies excluding the opposite. However, this scheme is not immediately applied to the case of *a priori* determination. What is determined *a priori* is not any specific object in a domain, but all objects in that domain. Correspondingly, the *a priori* determination of a domain of objects is not any *low-order property*, but *the highest-order property*. The *a priori* determination of the positions between two bodies is not the property of, say, 'being five miles from', but the most indeterminate spatial property 'being next to'. Excluding the indeterminate general relation does not determine any positive property or relation. Rather, it cancels all the possibilities of meaningfully attributing *any* spatial property to bodies. If it were the case, to attribute any specific spatial property to the objects in question is to commit the *categorical mistake*.

Finally, the *a priori* determinations are *relational properties*. As the passage indicates, appearances are determined with regard to *relations*. Outer appearances are determined with regard to the relations of space, whereas appearances in general are determined with regard to the relations of time. Only relations can be universally and necessarily valid of a domain of objects.¹⁶³

Therefore, the new determinations or content added to the objects is the *general relational* determination. The way the categories determine the epistemically significant objects is to determine *a priori*, that is, universally and necessarily. These new determinations do not belong uniquely to any object, or any kind of object. It indifferently subsumes all objects in the framework of space and time and in the reach of possible consciousness. The initial formulation of *a priori* determination could be articulated as follows: for any object x in a certain domain D and for relational concept C , x is determined *a priori* with regard to C =Def. x *necessarily instantiates* C .

¹⁶² The price it pays for meeting the universality requirement is that it is not valid of things in themselves.

¹⁶³ Kant's emphasis on the priority of relation to relata is striking. As for certain relation, Kant could be seen as a follower of Aristotelianism. On the one hand, relation does not depend on any *particular* relata for its existence; On the other hand, relation depends on *some* relata for its existence.

5.3 The Implications of the Transcendental Path

In the previous section, I have clarified *what it means* for representation to determine object *a priori* and why it is the *only alternative* for make-actual model if it is committed to the horn representation that makes object possible. However, it is possible that the notion of *a priori* determination is *empty*. In this section, I will address the question as to in *how it is possible* for the representation to determine the object *a priori*.

From the fact that concepts determine objects *a priori*, it trivially follows that the model must satisfy the three requirements: (i) the objects must be in a way such that they are susceptible to be determined by *a priori* concepts; (ii) the *a priori* concepts must be in a way such that they are susceptible to determine the objects; (iii) there must be a way such that it can make such determination realized. From the three requirements arise the following three how-questions:

(Q1) *How* the objects can be susceptible to be determined by *a priori* concepts.

(Q2) *How* the *a priori* concepts can be susceptible to determine the objects.

(Q3) *How* other conditions can be satisfied.

The answers Kant gives are as follows:

(A1) The objects must be *idealized* such that it can be legislated by the human mind.

(A2) The categories must be *singularized* such that it can be displayed *in concreto*.

(A3) The mind must be equipped with some faculty such that it can bring about the laws of nature.

The three answers commit Kant to his controversial *idealism*, obscure *schematism*, and notorious *psychologism*, which constitute the unmistakable trademarks of transcendental philosophy. Before I respectively expound these three implications of Kant's Copernican move, I would like to have a brief survey of the *negative* consequences of this transcendental path in the hope of clarifying why it is difficult to *propose a formulation* of *a priori* determination, and why it is even more difficult to *accept its consequences*.

This question of how it is possible for representation to determine object *a priori* is elusive, if not entirely unintelligible. As Kant shows, one cannot make sense of the conditions of *a priori* determination in a straightforward way.¹⁶⁴ Rather, both the representation and the object in question must be radically *reconceptualized*. By the reconceptualization I do not mean Kant's following moves: on the one hand, representations are identified not as intellectual concepts of the real use of understanding, but as *a priori* concepts of understanding, and, on the other hand, objects are identified not as things in themselves, but as things that appear to us. While the first change is merely terminological, the second change is more substantial for it is motivated by the Givenness Thesis of cognition that objects must be given to us if they are to be cognized at all. Rather, Kant reconceptualizes the two relata in a far more radical way: *a priori* concepts of understanding are *replaced by the schemata*, i.e. transcendental time-determination, and things appear to us are *reduced to representations*, i.e. mind-dependent entities.

The consequences of the Copernican Revolution are profound and far-reaching. In the first place, the Copernican turn *makes things unbelievable*. Idealism is a position characteristic of reducing physical objects into representations. It is *justified*, but it is *unbelievable*. Even idealistic precedents do not alleviate the intellectual shock. It is difficult for us to lend credence to the theory without believing in a realistic metaphysics.

In spite of the idealistic inspirations, Kant does not immediately see *how far* he is led, and what repercussion will be caused in the future path. The transcendental idealism results in a further repercussion: the *object is lost*. The repercussion is paradoxical: in order for categories to be applied to objects, one must concede to the truth of idealism. The concession to idealism results in that the newly introduced representations lose their objects (and that the temporal sequence loses objective time-determination). If Kant could not make a response to the problem, the promise of Copernican move would be bleak.

In the second place, the Copernican turn *makes things irrelevant*. We expect that Kant offers an answer to the question of how *a priori* concepts are related to objects. It turns out that it is schemata, rather than categories *per se*, that are related to objects. Kant's answer appears to simply miss the point. Although Crusius illegitimately introduces God as the common cause between thoughts and things outside thoughts, his pre-established harmony intellectual system has at least one merit: it is *concepts rather than anything else* that represent objects. Kant is still obliged to provide justification for this move. Even if Kant can finally prove that the objective reality of schemata implies that of

¹⁶⁴ Suppose that Transcendental Deduction does not presuppose the results of Transcendental Aesthetic that space and time are forms of sensibility and that appearances are representations.

categories, one might object that the objective reality of categories can be proved without resorting to schemata.

In the third place, the Copernican turn *makes things complicated*. In transcendental philosophy Kant gives an extraordinarily sophisticated theory of synthesis to account for the relationship between mind and the modal facts in the world. Consider Descartes' theory of perception of intellect. Even if it is deplorably *false*, it is unparalleled *elegant*. The natural light can elevate us to penetrate the eternal truth created and laid down by God without appeal to further mental machinery. In developing his doctrine of synthesis Kant is committed to a theory of mind burdened with heavy metaphysical presupposition. For instance, Kant seems to postulate the mathematical synthesis and dynamical synthesis to be two numerically distinct kinds of activity which are responsible for different kinds of modal truths.

The above considerations suggest that to take a transcendental path means to accept following challenges which seldom people dare take: (i) one must have the insight into what conditions the Copernican model must satisfy in order for it to be intelligible at all; (ii) one must have the courage to accept all the consequences that flows from Copernican model, no matter how counter-intuitive they are when taken in themselves; (iii) one must have the skill to cope with the repercussions caused by the consequences of Copernican model upon other parts of the system.

On the above analysis, Kant's transcendental philosophy is, on the one hand, *counter-intuitive*, and it is on the other hand, of *high theoretical cost*. Then, the natural question is why we have to accept it. In my view, the answer is quite simple: transcendental philosophy brings us *huge theoretical benefits*. It can help us to explain the synthetic *a priori* propositions, the laws of nature, personal identity, and the antinomy between freedom and determinism.

This does not suggest that Kant's characteristic transcendental path is favored because it involves *theory choice*, and it is an inference to the *best explanation*. Theoretical benefits of the transcendental system such as *explanatory power* do count as a theoretical virtue, but theoretical virtue is not *the reason* why Kant embraces it. For Kant, the move to the transcendental path is not a matter of taste, but a matter of truth. Kant's transcendental philosophy is true not because some phenomena *can* be explained by it, but because those phenomena *must* be explained and they *can only* be explained by it against the background of a set of assumptions.

Again, we are brought back to Kant's commitment to scientific actualism. For Kant sciences are actual and therefore correct, and sciences are synthetic *a priori*. These two basic facts are non-

negotiated. As I have noted, the explanation of synthetic *a priori* proposition is the most important criterion to measure the success of a theory.

That is why Kant's *quickest argument* often collapses into such a simple linear version: *because* scientific actualism is true, *therefore* metaphysical realism is false. This is the most fundamental conflict underlying the surface argument in the *Critique*. In fact, the official argument is a little bit complicated. In the *Critique* empiricism is taken into account as the standard epistemological match of realist metaphysics. The argument goes like this: If metaphysical realism is true, there would be no synthetic *a priori* propositions. Why? It is so precisely because metaphysical realism is only compatible with an empiricist epistemology characteristic of a reception model of knowledge. We know that *not even this critique story is the whole story*. Things are much more complicated. That is how we find in his Reflections and why we reconstruct the spectrum of philosophical systems, and examine why all of them doomed to fail.

5.4 The Idealism Implication

5.4.1 The Argument from Objective Reality

Idealism lies at the heart of the Copernican Revolution. Kant repeatedly stresses the key to escaping from the predicament is to see appearances as representations. Furthermore, it helps foster the other two consequences: the reconceptualization of schemata and the introduction of transcendental synthesis.

While Kant formulates a variety of arguments for idealism, it is usually thought that idealism depends on the results of Transcendental Aesthetic. Indeed, Kant's official direct arguments do find themselves in Transcendental Aesthetic. However, in Transcendental Deduction there is one independent argument for idealism directly bearing upon the relation of *a priori* concepts to objects. This most explicit connection between the Copernican model of mind and world with idealism appears in the very last section of A-Deduction, which is titled with "Summary representation of the correctness and unique possibility of this deduction". The argument shows how to *proceed from* the Copernican model to its implication, and how idealism is a *consequence* of the Copernican model of mind and world:

If the objects with which our cognition has to do were things in themselves, then we would not be able to have any *a priori* concepts of them at all. For whence should we obtain them? If we take them from the object (without even investigating here how the latter could become known to us), then our concepts would be merely empirical and not *a priori* concepts. If we take them from ourselves, then

that which is merely in us cannot determine the constitution of an object distinct from our representations, i.e., be a ground why there should be a thing that corresponds to something we have in our thoughts, and why all this representation should not instead be empty. But if, on the contrary, we have to do everywhere only with appearances, then it is not only possible but also necessary that certain *a priori* concepts precede the empirical cognition of objects. For as appearances they constitute an object that is merely in us, since a mere modification of our sensibility is not to be encountered outside us at all. (A128-A129)

This characteristic Kantian argument can be reconstructed as follows:

- (1) The objects of cognition are either things in themselves or representations.
- (2) If the objects of cognition are things in themselves, then either object makes the concept possible, or the concept makes object possible.
- (3) If it is the case that the objects make the concepts possible, then concepts are empirical, which contradicts with the *apriority* of the concepts in question.
- (4) If it is the case that concepts make objects possible, then the concepts are empty, which contradicts with the *reality* of the concepts in question.
- (5) The objects of cognition are not things in themselves.
- (6) The objects of cognition are representations. (from (1) and (5))

For (1) and (2): Premise (1) is a conceptual truth. Everything can be either mind-independent or mind-dependent. If something is former, it is the thing in itself; if it is latter, it is representation. Premise (2) formulates a grounding dilemma with which we have engaged ourselves.

For (3) and (4): The *reductio* assumptions in (3) and (4) are that there are concepts that are both *a priori* and objectively real. By assuming that *a priori* concepts are related to objects, this argument begs the very question of transcendental deduction. It does *not argue for* the truth of the Copernican model, but *assumes* it without justification. What the argument intends to show is *what follows if* we assume that the Copernican model that *a priori* concepts determine objects. Or more precisely, it intends to show what demand the Copernican model makes upon the *metaphysical nature* of the objects in question. It poses the urging question on what kinds of metaphysics of objects we should accept. Since we are concerned with idealism as a consequence of Copernican model of

representation and object, this argument is precisely the one we need to call for right now, and it is very suitable to place it here.

As is made clear by (2), (3), and (4), as long as we cling to a realistic metaphysics, pure concepts cannot be possibly related to objects. If the two horns of the dilemma must be rejected, it does not imply the falsity of the *reductio* assumption and thereby *cancel* the question that poses this dilemma. It instead reveals that the problem lies in some implicit assumption that underlies the way in which the dilemma is formulated. This implicit assumption is nothing but the metaphysical reality of physical objects that serve as the objects of cognition. With the help of the *reductio* assumption, the rejection of the two horns of the dilemma constitutes a fatal attack on the presupposed *realistic metaphysics* of physical objects.

What is particularly noteworthy is the claim in (4) that if the objects of cognition are things in themselves, then the *a priori* concepts would be empty. The rejection of the second horn of the dilemma in a realistic framework shows that *even if* we have *a priori* concepts, provided a successful derivation of *a priori* concepts is available, the pure concepts could not be applied to objects at all and remain to be merely “**subjective conditions of thinking**” (A89/B122). If objects were utterly independent of the subject, then the gap between mind and world is *too huge to be closed*. The world *has nothing a priori to do with* mind, and mind *can do nothing a priori to* the world. It is wildly impossible to suppose that the human mind can make a broadly causal difference on a mind-independent world.¹⁶⁵ Only divine mind can make actual the object by merely intuitively representing it. In any case, the human mind cannot elevate their spontaneity up to the divine level. Therefore, the moral is that the world must exist in such a way that it can be compromised by the mind.

When the realistic metaphysical assumption is replaced by the idealistic one, the dilemma posed by Kant’s puzzle does not disappear but reemerges anew. In the new dilemma in an anti-realistic framework, there likewise exist two parallel alternatives: either the object makes the concept possible, or the concept makes the object possible. In the first case, it suffers from the very same objection to the first horn of the realistic dilemma, for what is in play is still the borrowing model of knowledge.

It is intriguing that the empiricist epistemology is independent of the kind of the metaphysics of objects that is adopted. Even if the objects of cognition are merely representations, the borrowing model of knowledge still merely copies the content of these representations and

¹⁶⁵ Behind the limitation of making causal difference is the idea of ontological hierarchy. The conception of ontological hierarchy is also evident in Kant’s argument from laws of nature that will be discussed later, and the similar point is also made in Chapter 8.

therefore it cannot say anything more than what these representations teach it. However, the realism and idealism of physical objects differ only in metaphysical status, rather than in content. The empiricist epistemology is liberated from its underlying metaphysics.

This striking feature has profound implications. For one thing, empiricist epistemology, if properly qualified, is a deeply plausible epistemology. The independence of the empiricist epistemology from metaphysics implies that it is *compatible* with any kind of metaphysics. A properly qualified empiricist epistemology extends its theoretical viability and utility as far as it could be matched with metaphysics.

For another, empiricist epistemology is theoretically neutralized. Although a realistic metaphysics could be matched *only* with empiricist epistemology with regard to empirical knowledge, it does not imply that the reverse also holds. Indeed, an empiricist epistemology intended to match realistic metaphysics provides a convincing account of a scope of knowledge. But it does not add any theoretical virtue when compared with its rival theories. As we have seen, both Plato's rationalist epistemology and Kant's own epistemology can incorporate and appropriate a qualified empiricist epistemology without any compromise to the coherence of their own position.

The aftermath of the Copernican move is not exhausted by this argument for idealism. The idealist claim that objects of cognitions are indeed appearances does not by itself suffice for the solution to the problem with respect to how representations can *a priori* determine objects. What it claims is merely to *make the room which cannot be left* by metaphysical realism for the Copernican move. The other two necessary conditions will be expounded in the following two sections.

5.4.2 The Argument from Laws of Nature

(a) The Analysis of Argument

In the above argument, the Copernican model of mind and world is presupposed. Therefore, it can be seen as establishing a conditional claim that *if a priori* concepts determine objects, then objects are representations. It fails to establish the truth of idealism independently from the reality of *a priori* concepts.

Nevertheless, in Transcendental Deduction Kant proposes an independent argument from laws of nature for idealism that does not presuppose the conclusion from his idealistic view of space and time.¹⁶⁶ At the very end of the Second Section of Deduction in 1781 *Critique* Kant writes:

That nature should direct itself according to our subjective ground of apperception, indeed in regard to its lawfulness even depend on this, may well sound quite contradictory and strange. But if one considers that this nature is nothing in itself but a sum of appearances, hence not a thing in itself but merely a multitude of representations of the mind, then one will not be astonished to see that unity on account of which alone it can be called object of all possible experience, i.e., nature, solely in the radical faculty of all our cognition, namely, transcendental apperception; and for that very reason we can cognize this unity *a priori*, hence also as necessary, which we would certainly have to abandon if it were given **in itself** independently of the primary sources of our thinking. For then I would not know whence we should obtain the synthetic propositions of such a universal unity of nature, since in this case one would have to borrow them from the objects of nature itself. But since this could happen only empirically, from that nothing but merely contingent unity could be drawn, which would fall far short of the necessary connection that one has in mind when one speaks of nature. (A114)

The argument could be reconstructed as follows:

- (1) Nature consists either of things in themselves or of representations.
- (2) If nature consists of things in themselves, then we would have no *a priori* knowledge of the laws of nature.
- (3) We have synthetic *a priori* knowledge of the laws of nature.
- (4) Nature does not consist of things in themselves.
- (5) Nature consists of representations.

Assuming some *modal* truth, the argument starts from an exclusive disjunction on the metaphysical status of nature and then proceeds to *idealism* in virtue of the incompatibility of the modal truth with metaphysical realism.

Despite its independence, the basic structure of the argument from laws of nature is not something new. In fact, this argument is nothing but a dynamic parallel to the argument from geometry. Like geometrical truths, laws of nature are also expressed in synthetic *a priori* proposition.

¹⁶⁶ Guyer acutely notes it. See Guyer 1987, 379-382.

Like other epistemic arguments for idealism, Kant's argument rests on the crucial epistemic assumption of our knowledge of laws of nature. It might raise the doubt whether Kant is virtually making such an outright assumption or not. This doubt can be dispelled by Kant's note in his own copy of *Critique*: "the laws of nature really have their origin in the understanding, and are just as little to be encountered outside it *as space and time* are, is already proved by the in any case *already acknowledged assertion* that we cognize them *a priori* and *as necessary*["]"¹⁶⁷ Here Kant does not only underline the parallel between space/time and laws of nature, but he makes explicit the *a priori* claims are well-established.

(b) Human Legislation and Ontological Degeneration

The argument from laws of nature differs from the argument from geometry in its emphasis on the idea of legislation and its presupposition of the agency. Kant discusses the idea of legislation in many places:

Now we can characterize it as the faculty of rules. This designation is more fruitful, and comes closer to its essence. Sensibility gives us forms (of intuition), but the understanding gives us rules. (A126)

...Rules, so far as they are objective (and thus necessarily pertain to the cognition of objects) are called laws. (A126)

... *The understanding is* [thus not merely a faculty for making rules through the comparison of the appearances; it is itself] *the legislation for nature*, i.e., without understanding there would not be any nature at all[.](A126)

The idea "understanding as legislation for nature" marks one significant difference from both the old space arguments and the epistemic argument from geometry. Kant's idealism is distinctive. Firstly, *metaphysical idealism* rests on *space idealism*. Physical objects are representations in virtue of space as the form of sensibility. Second, the premise of Kant's argument starts from our possession of a body of knowledge, rather than from the nature of sensibility. In *Transcendental Aesthetic*, Kant's identification of space as the form of sensibility obscures the very distinctive character of Kant's idealism. It is in the argument from legislation that the distinctiveness of Kant's idealism achieves its peak. On the one hand, the argument from laws of nature does *not start with* the nature

¹⁶⁷ In Kant's works the notion of laws of nature is closely connected with that of experience.

of sense-perception, as the four old space-arguments do. On the other hand, it does *not result in any* theory of sensibility, as the argument from geometry does.

The step to idealism is decisive. Kant concedes to the elusiveness of the idea of legislation by human understanding¹⁶⁸, and he claims that it is “[in]comprehensible” (A113), “contradictory and strange” (A114), “exaggerated and contradictory” (A127). However, why does Kant soon claim “[o]n my principles it is easily comprehensible” (A113) and “one will not be astonished” (A114)? Why can the extraordinary idea of human legislation of nature be saved by idealism?

In my view, the key to the solution to this puzzle is the idea of an *ontological degeneration* that both of the above arguments presuppose. Traditionally, the ontological hierarchy has different levels: on the top, it is the *infinite divine entity*; in the middle, it is *finite concrete entities*; and on the bottom it is *mental entities*. The view is that the ontological status of physical objects degenerates to the mental entities, namely, from the middle to the bottom of the ontological hierarchy.

Leibniz notes that there is an analogy between God and human beings. In his *Discourse on Metaphysics* in 1686 Leibniz writes that “created substances depend upon God, who preserves them and who even produces them continually by a kind of emanation, just as we *produce our thoughts*”¹⁶⁹. In his later *Principles of Nature and of Grace* in 1714 Leibniz elaborates this idea in more detail:

It is not only a mirror of the universe of created things, but also an image of the divinity. The mind not only has a perception of God’s works, but it is even capable of *producing something that resembles them*, although on a small scale. For to say nothing of the wonders of dreams, in which we effortlessly (but also involuntarily) invent things which we would have to ponder long to come upon when awake, our soul is also like an architect in its voluntary actions; and in discovering the sciences according to which God has regulated things (*by weight, measure, number, etc.*), it imitates in its realm and in the small world in which it is allowed to work, what God does in the large world. (1989, 46)

As Leibniz observes, there exists a striking analogy between God and human beings despite their essential difference: God is the *producer of* the physical objects in the universe; likewise, we human beings are the *producers of* thoughts in our mind. In the dream we can invent things effortlessly, and the effortless invention puts us in a position akin to God, where God creates physical things effortlessly. Therefore, the way we have the dominance over our mental world is analogous to the way God has dominance over the physical world.¹⁷⁰

¹⁶⁸ The talk of the laws of nature and the talk of *a priori* determination are essentially expressing the same thing.

¹⁶⁹ See Leibniz 1989, 211-212.

¹⁷⁰ The above ontological hierarchy is about God, physical entities and mental entities. In another direction, the ontological hierarchy could be developed making use of the ambiguity of the term “idea”, which has nothing to do

Leibniz calls into attention the analogy between God and human beings in order to demonstrate the thesis that the human mind is qualitatively similar to, yet quantitatively inferior to, God. This is the famous doctrine that man is made in God's image. The world is created by God. It is our resemblance to God that explains the *intelligibility of the world* to us.¹⁷¹

Different from Leibniz, Kant's focus is not on the *creator role* of God, but on the *legislator role* of God. This move is understandable, since even sensible representations are not created by our human beings. For those who admit the existence of laws of nature is not *sui generis*. Rather, the notion of legislation implies the existence of a legislator. Traditionally, it is God who lays the laws for nature. The *theological dependence* of laws of nature on a law-maker is compatible with their *mind-independence*. According to this view, laws of nature are things in themselves. In an important way, human beings have their dominance over the mental not in the sense of *producing* representations, but in the sense of *ordering* representations.

Taken in itself, the *epistemic* or *mental atheism* that God does not have dominance over *any* mental state is not harmful to many philosophers. Even Leibniz is adherent to some weak version of it. However, when combined with the Kantian idealism of nature, epistemic atheism entails *natural atheism* that *God plays no role in nature*. Kant's philosophical radicalism precisely lies in the idea of legislation of nature by understanding: for Kant, we do not *resemble* God; rather, we *replace* God.

In my view, the legislation of nature by understanding has a twofold significance. According to the traditional interpretation, the attribution of the legislative role to human understanding marks the culmination of the Copernican Revolution. As far as the relation of representation to object is concerned, Kant's Copernican Revolution suggests that we should think the other way *around*. I contend that we could consider the issue from a different point of view. As far as the relation of the human to the divine is concerned, the legislation of human understanding marks the ascending of the human and the retreating of the divine.

(c) The Structure of Argument: Kantian Disjunctive Syllogism

with the order and law. The notion idea is ambiguous in early modern philosophy. Leibniz has already noted the problematic ambiguity of the notion of idea. On the one hand, it refers to the mental entities, and, on the other hand, it refers to the abstract entities. The two conceptions of ideas are developed respectively by Locke and Malebranche, the two most preeminent successors to Descartes' theory of ideas are. The abstract Platonic Ideas are God's Idea, while the Lockean ideas are human ideas. The ambiguity of 'idea' also constitutes an analogy between God and human beings.

¹⁷¹ For the doctrine that man is made in God's image in modern philosophy see Craig 1996.

In the following, I will say something about the general structure of Kant's argument for mind-dependence. What characteristic of Kant's arguments for idealism is the argumentative strategy one might call "Kantian disjunctive syllogism".

Influenced by Leibniz, German metaphysical tradition attaches great importance to conceptual analysis and deductive proof. The syllogism is universally regarded as the paradigmatic of deductive reasoning of logical validity. In fact, the syllogism is one of the most frequent techniques employed by German rationalist philosophers in building baroque metaphysical system. Since many systems of metaphysics start with a conceptual distinction, and the conceptual distinction is apt to function as the major premise of a disjunctive syllogism, it is no wonder why disjunctive syllogism is pervasive in rationalist metaphysics. The disjunctive syllogism of the form is as follows:

- (1) Major premise: Either P or Q.
- (2) Minor Premise: Not P
- (3) Conclusion: Q

What is distinctive of *Kantian* Disjunctive Syllogism is the Minor premise. The truth of the Minor premise is often deduced by *modus tollens*.

- (1) If R, then S.
- (2) Not S.
- (3) Not R.

The sub-argument by *modus tollens* consists of a conditional claim and a negation claim. The conditional claim is often a plausible *theoretical truth*. The negative claim is normally a *modal truth*. Again here we encounter a negative claim "Not S". The most characteristic feature of a Kantian disjunctive claim is that "Not S" is a *modal truth*. This modal truth is often assumed without justification. When Kant is charged with *begging the question* of his opponents, it is this modal truth that is called into question.

The Kantian disjunctive syllogism instantiates the following scheme:

- (1) Either P or Q.
- (2) If P, then R.
- (3) Not R.
- (4) Not P
- (5) Q

The paradigmatic Kantian disjunctive syllogism is the famous argument from science to idealism. The argument from laws of nature under discussion is also paradigmatic, though it is less known. The argument from the Copernican model to idealism is one complicated version of Kantian disjunctive syllogism.

- (1) Either P or Q.
- (2) If P, then either R or S.
- (3) Not R.
- (4) Not S.
- (5) Not P. (from (2), (3), and (4) by *modus tollens*)
- (6) Q

The distinctive feature of this argument is that the rejection of the disjunct P is made in virtue of a new dilemma, not in virtue of an incompatibility.

5.4.3 The Object Lost

Every theory has its costs as well as its benefits. Transcendental idealism is no exception. In spite of its theoretical utility, transcendental idealism brings forth a number of theoretical repercussions. To accept transcendental idealism implies to mitigate the repercussion. Indeed,

transcendental idealism comes at a much higher price, one that renders Kant's general program obsolete. This threat is to deprive our immediate representations of their objects.

In the context of transcendental deduction, a seemingly paradoxical implication emerges: the *objects of categories* are gained yet the *objects of representations* are lost. In order to show that categories are related to objects, we must resort to idealism and thereby reduce physical objects into representations. According to Kant's other views, however, these representations do not have objects.

It is important for us to distinguish two questions on distinct levels by distinguishing two different kinds of objects in the context of *relating categories to object* and *assigning objects to representations*. When we say that the categories are related to objects, we are saying that they are related to *appearances*. When we say that objects are supposed to be assigned to representations, we are referring to *objects other than appearances*.

Despite its importance, the threat of *losing object* is not adequately thematized by Kant, and even *downplayed* when mentioned. Around the corner of the end of "threefold synthesis", Kant writes:

All representations, as representations, have their object, and can themselves be objects of other representations in turn. Appearances are the *only objects* that can be given to us immediately, and that in them which is immediately related to the object is called intuition. However, these appearances are not things in themselves, but themselves only representations, which in turn have their object, which therefore cannot be further intuited by us, and that may therefore be called the non-empirical, i.e., transcendental object = X. (A108-A109)

In this dense passage, an inconsistency is revealed, though Kant does not develop it in detail and resolve it too quickly. The transcendental idealism claims that all appearances are representations. If transcendental idealism is correct, it follows that all appearances are representations. Furthermore, it is trivially true that representations are representations of objects. This universality of the claim of representation to object is built into the definition of representation; a representation without an object is not representation. Therefore, appearances as a set of representations have objects. Based on these observations, an argument can be reconstructed as follows:

(Premise 1) All Appearances are representations. (By Transcendental Idealism)

(Premise 2) All representations have objects. (By Definition of Representation)

(Conclusion 3) Appearances as representations have objects. (By Syllogism from 1 and 2.)

However, this characterization of appearances as representations in the light of transcendental idealism stands in conflict with another more trivial characterization of appearances by its definition. This latter characterization is connected with a more subtle line of reasoning focusing on the *immediacy* of intuition.

In Kant's view, representations must represent objects *O*s, and if the objects of representations are also representations, then as representations these objects of representations must also have further objects *O**s. To terminate this regress, the ultimate objects of representations must be *non-representational objects*. Without this *non-representational object*, the notion of representation without object would be incoherent. A *first-order representation* is one that *immediately represents the non-representational object* and does not include or presuppose further lower-order representation. No matter how high the order of a representation is, it must presuppose a first-order representation of an object, to which other higher-order representations can anchor.

According to Kant, intuitions are *immediate representations of objects*. The objects of intuitions or the *only* objects of intuitions are appearances, despite that these objects are undetermined for intuitions. It follows that appearances are immediately related to intuitions.

Along this line of thought, what Kant needs is not *the immediate representation of objects*, i.e. intuitions, but *the representations of immediate objects*, i.e. first-order representation. Although the latter notion of the representations of immediate objects is quite clear, it is left undecided what this notion *refers to*. In this situation, Kant makes move to identify the former with the latter, thus identifying first-order representations with intuitions.

Therefore, the *immediacy* requirement for intuition does not merely mean *non-discursivity*, i.e., not in virtue of marks; rather, it also means *first-orderedness*, i.e., not presupposing lower-order representation. Objects of intuition are not merely those objects that can be given to subjects not in virtue of marks, but those that cannot represent another set of representations and cannot find any objects for themselves. With this second construal of immediacy at hand, a second argument can be reconstructed from the quoted passage as follows:

(Premise 4) Objects of intuitions do not in turn have objects. (by the Second Definition of Immediacy)

(Premise 5) Appearances are objects of intuitions. (by Definition of Appearance)

(Conclusion 6) Appearances as objects of intuition do not have objects. (by Syllogism from 4 and 5.)

It is obvious that Conclusion 3 that appearances have objects and Conclusion 6 that appearances do *not* have objects are inconsistent. It is equally obvious that both arguments are logically valid. Then, which argument is unsound? Confronted with this difficulty, it seems that *at least one* of the premises of both arguments must be false. However, Premise 2, 4, and 5 are true by definition. The only *nontrivial premise* left open to objection is Premise 1, that is, transcendental idealism. It is tempting to suggest that the second line of argument undermines the first line of argument, and therefore it poses a serious challenge to idealism.

By contrast, as its rival theory, transcendental realism is immune from the challenge. If transcendental realism is true, then appearances *are* things in themselves. In this case things in themselves cannot possibly be representations. Instead, they are fundamentally real and independent, and thereby they are the perfect example of non-representational objects, namely, objects of first-order representations. It seems that transcendental realists do not to be worried by the danger of losing objects.

However, transcendental idealism is the last philosophical theory that Kant would forgo. For the initial success of vindicating the body of knowledge in mathematics seems to show an attractive picture of his general program of Copernican Revolution. Furthermore, transcendental idealism seems not merely the sufficient condition but also the necessary one for grounding synthetic proposition *a priori* in pure mathematics. If Kant is unable to offer a satisfactory solution to this problem, the plausibility and the promise of transcendental idealism are desperately undermined, since a theory that opens the door of explaining the first half of the phenomena yet closes it before engaging the second half is by no means a successful one. But to reject transcendental idealism is no more than to give up the only hope to accomplish Kant's grand program of vindicating science at the very beginning. In my view, this inconsistency is the most dangerous enemy to the tenability of transcendental idealism, because it contradicts a number of *conceptual truths* by definition. Now, the burden of proof is on Kant's side, and he must find some way to resolve this inconsistency.

In order to dissolve this problem, Kant makes a move by *reinterpreting* and *restricting* the domain of objects of intuitions. From the second argument, it is inferred that it is true that objects of intuition, whatever it might be, are not required to have further represented objects, but the represented objects referred to here can be interpreted as merely *empirical objects*, rather than *objects in its broadest sense*. What the Premise 4 exactly says is that the appearances as objects of intuition do not have empirical objects.

A second move followed would be that, in addition to empirical objects, there is another set of *non-empirical objects* that play the role of not being the objects of intuition, yet being the objects of representation. That is exactly what Kant does: he introduces the *transcendental objects* in addition to empirical objects. In effect, Kant says that objects of intuitions as representations cannot have empirical objects, yet they have transcendental objects to meet the claim of any representation to the object. Therefore, the postulation of transcendental objects is a consequence of Kant's idealism, and it could also be viewed as a price paid for the transcendental path.¹⁷²

5.5 The Schematism Implication

5.5.1 What Schemata Are

What are these necessarily instantiated determinations or properties that are attached to objects? Kant's suggestion is that these determinations are *transcendental time-determinations*, which are nothing but schemata. Consider the following passage:

The schema is [in itself always only a product of the imagination; but since the synthesis of the latter has as its aim no individual intuition but rather] only the unity in the determination of sensibility[.] (A140/B179)

From the above passage it is clear that the schematism of the understanding through the transcendental synthesis of imagination comes down to nothing other than the unity of all the manifold of intuition in inner sense, and thus indirectly to the unity of apperception, as the function that corresponds to inner sense (to a receptivity). (A145/B185)

Now in the original apperception all of this manifold, so far as its temporal relations are concerned, is to be unified... This **synthetic unity** in the temporal relation of all perceptions, **which is determined a priori**, is thus the law that all empirical time-determinations must stand under rules of general time-determination[.] (A177/B220)

¹⁷² In some sense, the burden of proof is not relieved, but transferred to the notion of transcendental object. Kant is obliged to give a convincing account of the nature and function of transcendental object.

Then, what is transcendental time-determination? As Kant later explains:

Now in the original apperception all of this manifold, so far as its temporal relations are concerned, is to be unified... This **synthetic unity** in the temporal relation of all perceptions, **which is determined *a priori***, is thus the law that all empirical time-determinations must stand under rules of general time-determination[.] (A177/B220)

Accordingly, transcendental time-determination is “the unity in the determination of sensibility” or “the unity of all the manifold of intuition in inner sense”. First, the unity is not analytic and thus logical, but synthetic and temporal. For example, the schema of causality is “the succession of the manifold insofar as it is subject to a rule” (A144/B183). Second, it is transcendental since it is determined *a priori*. Along with time, the unity in the time-determinations constitutes the general condition of sensibility. Therefore, these time-determinations are necessarily instantiated. In other words, Objects necessarily instantiate the synthetic unity of temporal relations.

The schematization of categories appears to suggest that categories are reduced to schemata, and therefore they are identical with schemata. However, it is not the case. Here emerges a difference between the idealism implication and the schematism implication. As for schematism, schemata are *numerically distinct* from categories. Schemata are neither *identical with* nor *a species of* categories. Schemata are transcendental time determinations, while categories are general concepts of understanding. As Kant says explicitly, “it is clear that there must be a third thing, which must stand in homogeneity with the category on the one hand and the appearance on the other, and makes possible the application of the former to the latter” (A138/B177). If the schema is introduced as “the third thing”, it trivially implies that it is numerically distinct from the category, which plays the role of “the first thing”. Moreover, Kant offers no account that schemata can be *reducible to* categories.¹⁷³

As for idealism, by contrast, physical objects or appearances are *reducible to* representations, but the former is still *identical with* the latter. We just have an interpretation of the metaphysical status of physical objects. By analogy, given our knowledge of physics, we could say that when we

¹⁷³ Longuenesse seems to identify the rule conception of the concept with the schema. For instance, Longuenesse writes: “The concept is a rule insofar as it is the consciousness of the unity of an act of sensible synthesis or the consciousness of the procedure for generating a sensible intuition. This first sense of *rule* anticipates what Kant, in the Schematism of the Pure Concepts of the Understanding, calls a *schema*” (1998, 50). On many occasions, Kant seems to identify the schema as a role played by the category without carefully distinguishing the schema from the category. Strictly speaking, they are not numerically identical.

touch table, we touch the motion of electrons. But the introduction of the motion of electrons does not make the table a different thing.

As I understand, one of the deepest problem in the schematism implication in particular and in the Transcendental Deduction in general is found in the following two claims: on the one hand, the official task of transcendental deduction is to prove that categories are related to appearances. On the other hand, however, the Copernican Revolution requires that “the appearances must not *be subsumed under* the categories *per se*, but only under their schemata” (A181/B223).

Now the crucial question is what the relation of the schema to categories is, and why the schema is the eligible agent for categories to represent objects, or to put more explicitly, why schemata can represent appearances in such a way that even if appearances are immediately subsumed under schemata, we are still justified to say they are also *obliquely* subsumed under categories *per se*. In order to answer this question, we must examine the motivation of Kant’s schematization of categories.

5.5.2 The Motivation of Introducing Schemata

Categories are schematized in order to accommodate the idealization of empirical objects. Two interpretations of the motivation of the schematization of categories could be brought under consideration. On the first semantic interpretation, schemata are introduced because in addition to things in themselves idealism creates a new set of objects, of which categories cannot be truly predicated. On the second metaphysical interpretation, schemata are introduced because the nature of the objects is changed so that the nature of their properties are changed.

In introducing schemata, Kant’s official line of reasoning seems to be as follows: (i) categories are only of *empirical use*, and therefore (ii) categories must be *schematized*. I will turn to them one by one. The use of categories is a question about *which domain of objects* categories is related. In his 1781 *Critique* Kant develops his argument for the empirical use of categories for the first time in Schematism-Chapter, where Kant writes:

concepts are entirely impossible, and cannot have any significance, where an object is not given either for them themselves or at least for the elements of which they consist, consequently they cannot pertain to things in themselves (without regard to how and whether they may be given to us) at all; that, further, the modification of our sensibility is the only way in which objects are given to us; and, finally, that pure concepts *a priori*, in addition to the function of the understanding in the category, must also contain *a priori* formal conditions of sensibility (namely of the inner sense) that contain the general condition under which alone the category can be applied to any object. We will call this formal

and pure condition of the sensibility, to which the use of the concept of the understanding is restricted, the **schema** of this concept of the understanding[.] (A139/B178)

Thus the schemata of the concepts of pure understanding are the true and sole conditions for providing them with a relation to objects thus with significance, and hence the categories are in the end of none but a possible empirical use, since they merely serve to subject appearances to general rules of synthesis through grounds of an *a priori* necessary unity[.] (A145-146/B185)

Kant's argument runs like this:

- (1) Concepts have significance (relation to objects) *only if* their objects can be given to us.
- (2) Sensibility is *the only way* in which objects are given to us.
- (3) Concepts can have significance *only if* their objects are given in sensibility.
- (4) *A priori* concepts of understanding can have significance *only if* their objects are given in sensibility.
- (5) Therefore, categories are only of empirical use, not of transcendental use.

This argument neither presupposes nor entails idealism. Initially, this argument rests on the crucial premise (1), the *Givenness Thesis* of cognition, which Strawson calls “the principle of significance”¹⁷⁴. The Givenness Thesis should be distinguished from idealism. The Givenness Thesis by itself does not imply idealism. It merely asserts that the object's being given in intuition is a necessary condition for the cognition of the object.

Even in conjunction with (2), it still does not commit Kant to idealism. Since an object is given to our sensibility by means of affection, the conjunction constitutes what Langton calls the *Receptivity Thesis*.¹⁷⁵ Receptivity Thesis is a very plausible view which is meant to acknowledge the causal nature of empirical knowledge. As the conclusion (4) shows, even the objects for categories must be given in sensibility.

Kant's formulation often seems to suggest that it is the empirical use of categories that motivates the schematization of categories. As the following quotation from Analogies makes explicit, “these analogies have their sole significance and validity not as principles of the

¹⁷⁴ See Strawson 1966, 3-5.

¹⁷⁵ See Langton, 1998, 23.

transcendental use of the understanding but merely as principles of its empirical use, hence they can be proven only as such; *consequently* the appearances must not *be subsumed under* the categories *per se*, but only under their schemata.” (A180-181/B223) Taken literally, Kant claims that the schematization of categories is a consequence of his view that categories are of empirical use. In a similar passage Kant writes:

the categories in their pure significance, without any conditions of sensibility, should hold for things in general, **as they are**, instead of their schemata merely representing them **how they appear**, and they would *therefore* have a significance independent of all schemata and extending far beyond them. (A147/B186)

This passage seems to suggest that Kant simply *asserts* a kind-correspondence between representation and object without argument. On the one hand, categories *by definitions* are concepts of things in general, and they are supposed to be related to things in themselves or things in general, *even though* we still cannot make it intelligible how categories refer to things in themselves provided things in themselves are given to us. Only if categories have the transcendental use can we say that categories *per se* are related to objects. On the other hand, schemata are supposed to be related to appearances. If categories are related to appearances and conditioned by sensibility, then it is schemata that are related to appearances.

On the semantic interpretation, categories are schematized because categories cannot be *truly predicated* of empirical objects. For instance, the concept of fish is not truly predicated of whales, because the whale is not a species of the fish. Likewise, categories *per se* could not generate true predication of the empirical objects, for categories *per se* are true of things in themselves, not of appearances. By contrast, schemata could be truly predicated of appearances. To predicate categories of appearances or representations is simply to commit a categorical mistake.

The distinction between things in themselves and appearances is a consequence of Kant’s commitment to idealism. It seems that the distinction between categories *per se* and schemata is in turn a consequence of the distinction between things in themselves and appearances. The line of reasoning might be as follows:

(1) If categories are truly predicated of something, then they are truly predicated of things in themselves. (Uniqueness Claim)

- (2) According to idealism, things in themselves are not only distinct from appearances, they also do not overlap with them. (Idealism)
- (3) Categories are not truly predicated of appearances as the objects of intuition.
- (4) In fact, there are concepts that are true predications of appearances as the objects of intuition.
- (5) The concepts must be numerically distinct from categories.
- (6) These representations that are truly predicated of appearances are nothing but schemata.

This argument outlines a story of how schemata are introduced to *save the true predication* of empirical objects before our sense. These true predications are nothing but the synthetic *a priori* propositions in pure physics, as Kant acknowledges in the Introduction to 1787 *Critique*.

One might think that the premise (2) is crucial for the introduction of schemata. If (2) were changed from idealism to realism, then we would have the following argument: (1) If categories are truly predicated of something, then they are truly predicated of things in themselves. (Uniqueness Claim) (2*) If transcendental realism is true, then things in themselves are identical with appearances. (3*) As a result, for transcendental realism categories are applied to appearances as well as to things in themselves.

On my view, however, this line of reasoning is misguided. As for (2), it is important to bear in mind that idealism does *not* make appearances a different set of things. Therefore, the correspondent introduction of schemata is dubious. As has been shown in the previous section 5.3, idealism is merely committed to a reductive metaphysics of appearances. This implies that in extensional context one sentence could be paraphrased into another sentence in virtue of reductive analysis without changing the truth value of the original sentence. Take the following example for illustration: if the sentence that I touch the table is true, then the sentence that I touch the motion of electrons is also true. Therefore, we could nonetheless perfectly say that categories *per se* are truly predicated of appearances, even if idealism holds. As a result, the introduction of schemata is independently from whether idealism is true or realism is true. Nevertheless, it remains undetermined whether it is categories or schemata that are truly predicated of appearances to generate the acknowledged synthetic *a priori* propositions. Therefore, it cannot explain the motivation of the introduction of schemata.¹⁷⁶

¹⁷⁶ One could pose a further question on the premise (1): why categories are designed for being applicable of things in themselves. To say that it is so by definition does not solve the problem.

5.5.3 A New Justification: Schemata as Determinations

According to the metaphysical interpretation, schemata are introduced as the instantiation of categories, since categories *per se* cannot be the *instances of categories* in empirical objects. As we will see, on the second interpretation, the Copernican move and the accompanied ontological degeneration do motivate the schematization of categories, but in a quite different way.

Initially, this new interpretation appears to be puzzling. One might object that true predication is equivalent to instantiation: when we say that *F* is truly predicated of *x*, we are saying that *F* is instantiated in *x*. However, in this formula the *instantiated F* is left out. Schemata are introduced to play the role of the necessary property of objects.

The simple point Kant makes is that *categories themselves* and the *instances of categories* are numerically distinct. It brings another consequence of generality: the distinction is also independently from whether idealism or realism is true. Even appearances are identified with things in themselves, categories *per se* are still numerically distinct from their instantiation.

However, this does not suggest again that idealism does not play any role in motivating the introduction of schemata. The way in which categories are instantiated does depend on whether idealism is true or false. Schematization is precisely the particular mode of the instantiation of categories when idealism is true. Consider the following account. As we have seen, to say that something *a priori* determines objects is to say that something adds new determinations or properties to the otherwise undetermined empirical objects and that these determinations or properties must be *necessarily* instantiated. As Kant makes clear, “in accordance with [the principles], everything (that can even come before us as an object) *necessarily* stands under rules” (A159/B198).

Now the question is how it is possible for the determinations to be necessarily instantiated. The answer is nothing but Kant’s idea of ontological degeneration. Empirical objects do not suffice for necessary instantiation, for empirical objects can still be things in themselves, the robust reality of which leaves no room for *a priori* determination. It is at this point where idealism steps in. According to Kant’s idealism, physical objects are reduced to representations. What is more important is that for Kant physical objects are representations *in virtue of being in space and time* which are ideal forms of sensibility. In this light, spatial and temporal properties are necessarily instantiated by physical objects. Without space and time, physical objects are not only deprived of *spatial* and *temporal properties*; they are also deprived of *all the necessary properties* that they can have. Therefore, to say that empirical objects are subsumed under schemata is to say that empirical

objects are *subsumed under space and time*, rather than to say that empirical objects are *subsumed under empirical concepts*. The theoretical benefit of this interpretation is that it could explain away the worry that the introduction of schemata undermines the project of Transcendental Deduction by making categories irrelevant to the empirical objects.

5.5.4 The Response to Incoherence Objection

According to my interpretation, the schemata are the instantiation of the categories on the one hand, and the necessary properties of the empirical objects on the other hand. However, my interpretation seems to run counter to the dominant interpretation that the schemata serve as the *rules of the synthesis* of imagination.¹⁷⁷ One theoretical benefit of my interpretation is that it could provide a solution to the inherent problem of the inconsistency of Kant's doctrine of schemata.

Kant has two different characterizations of the schema. On the one hand, Kant characterizes schemata as the *product of the synthesis of transcendental imagination*, and, on the other hand, he characterizes schemata as the *condition of the application of categories* to appearances by means of the synthesis of transcendental imagination. Consider the following passages for the product characterization:

The schema is in itself always only a product of the imagination[.] (A140/B179)

The schema of a pure concept of the understanding... is a **transcendental product** of the imagination, which concerns **the determination of the inner sense ingeneral**[.] (A142/B181)

Equally, there are passages for the condition characterization:

Hence an application of the category to appearances becomes *possible by means of the transcendental time-determination* which, as the schema of the concept of the understanding, mediates the subsumption of the latter under the former. (A139/B178)

Thus the schemata of the concepts of pure understanding are the true and sole *conditions for* providing them with a relation to objects, thus with **significance**[.] (A145-146/B185)

¹⁷⁷ For instance, Longuenesse holds that the schemata is the rule of synthesis. However, on the other hand, she points out that the schema is the instance of the category, as if there is no tension between the two specifications. (19998) It is not clear why the *rule of the synthesizing activity* could be the *rule of the synthesized objects*.

The two characterizations are not immediately incompatible, but they would elicit serious logical difficulty. Even Kant *himself* recognizes the difficulty in introducing schemata. Kant writes in his note R6359 (between 1796 and 1798):

The difficulty seems to arise because the transcendental time-determination itself is already a *product* of apperception in relation to the form of intuition and thus itself raises the question *how* the application of the categories to the form of intuition is *possible*, since the categories and the form of intuition are heterogeneous. In general, the schematism is one of the most difficult points. – Even Herr Beck cannot find his way about in it. – I hold this chapter to be one of the most important. (AA 18:686)

As Kant explicitly concedes, the question of transcendental schemata is “one of the most difficult” as well as “one of the most important”. Fortunately, Kant also points out where the difficulty lies. Obviously, in “the question how the application of the categories to the form of intuition is possible” the schema ends up with two unacceptable consequences: either with an *infinite regress* or with *vicious circularity*. However, it is far from clear what specific formulation of the difficulty Kant keeps in mind. When it leads to infinite regress, the argument runs like this:

- (1) The schema as transcendental time-determination is a product of the application of categories. (By the product characterization)
- (2) Every application of categories requires a mediator between two heterogeneous elements. (By the condition characterization)
- (3) The schema itself as the mediator requires another mediator between two heterogeneous elements.

When it leads to vicious circularity, the argument could be formulated as follows:

- (1) The application of category to appearances is conditioned by the schema. (By the condition characterization)
- (2) The schema functions as the condition of application only if it is brought out by transcendental imagination. (By the product characterization)

(3) The synthesis of transcendental imagination is conditioned by the category. (By Transcendental Deduction)¹⁷⁸

Moreover, this note ends by merely pointing out the difficulty without giving any hint to the solution of the problem. We are not informed what the solution Kant has in mind, nor even whether he has a solution at all. While I think that there is no easy way to overcome the difficulty in either formulation, in what follows I will attempt to provide a solution to the difficulty in the light of my previous proposal of Kant's motivation of introducing schemata.

According to condition characterization, schemata are the conditions of application of categories to appearances. The term "application" is desperately ambiguous.¹⁷⁹ When it is read in the metaphysical sense, then the notion of application of categories to appearances means categories *ground* appearances and make experience possible. It is the Transcendental Deduction that precisely addresses this question.

When it is read in the semantic sense, then the notion of application of categories to appearances means that categories as concepts *refer to* the empirical objects that are already determined by categories. It is not difficult to find that the semantic reading of application presupposes the metaphysical reading of application.

When it is read in the pragmatic sense, then the notion of application of categories to appearances means how we *ought to* apply categories to appearances. The most salient feature is the normativity involved in it, which is absent in the previous two senses. In fact, this is what the official task of the faculty of the power of judgment, which is supposed to "show generally how one *ought to* subsume under these rules, i.e., *distinguish* whether something stands under them or not".¹⁸⁰ Whether it is determining or distinguishing, it is a matter of a person, though the Schematism chapter goes astray in the direction of the metaphysical sense. One can understand the

¹⁷⁸ For instance, Kant writes that "[c]onsequently all synthesis, through which even perception itself becomes possible, stands under the categories". (B161)

¹⁷⁹ Longuenesse acutely notes the ambiguity of the notion of the application of categories to appearances, and she uses "synthesis" and "subsumption" to designate the two different senses. (1998, 244) however, I think that whether the notion of subsumption is used in the metaphysical sense or in the semantic sense is undetermined. This objection is directed not to Longuenesse's verbal use of a label, but to her substantial claim that schemata play the mediating role in "the *subsumption* of sensible objects under the pure concept of the understanding is made possible" (1998, 245).

¹⁸⁰ There are a variety of understanding of the task of the power of judgment. In addition to my reading, it could be understood as the epistemic identification of the particular under general, as indicated in the following passage: "If the understanding in general is explained as the faculty of rules, then the power of judgment is the faculty of **subsuming under rules**, i.e., of *determining* whether something stands under a given rule (*casus datae legis*) or not." (A132/B171)

difference between the semantic sense and pragmatic sense of application by an analogy to the distinction between semantic meaning and speaker's meaning of a term.

My proposal is that if the notion of application is understood in the metaphysical sense, the infinite regress or vicious circularity is unavoidable. However, if it is understood in the semantic sense or even in the pragmatic sense, then there is no such problem. The product characterization of schemata claims that the schema as the *instantiation* of the categories is a consequence of the metaphysical ground of transcendental imagination. And the condition characterization of schemata claims that the *predication* of categories of appearances presupposes the instantiation of the schemata. Therefore, both characterizations are consistent. The story roughly goes like this: categories *per se* refer to objects in virtue of their schemata, and pragmatically when we find the schema in experience, we are then in a position to use categories in our judgments either implicitly or implicitly to subsume them under concepts.

Another interpretative bonus is that this distinction helps us in understanding why Kant holds that appearances cannot immediately be subsumed under categories unless there is a mediator. When Kant speaks of subsumption, he is not speaking of the logical subordination of an individual under a concept, or of a lower concept under a higher one. Rather, Kant is speaking of the impossibility of the metaphysical grounding of the individuals in discursive concepts, or of the illegitimacy of the subordination of an individual under a concept without the metaphysical grounding. For an overview of the semantic and metaphysical level see the following table:

Semantic	Metaphysical
Categories designate properties (schemata)	Categories ground properties (schemata)
-----	Properties (schemata) ground objects
Categories refer to objects	Categories ground objects

5.6 The Psychologism Implication

5.6.1 The Demand for Determining Ground

As I have suggested, to say that concepts make objects possible in the sense of *a priori* determination is to say that concepts add *a priori* determinations to representations. In order for objects to necessarily instantiate properties, objects must be idealized, and concepts must be schematized. Intuitively, there must be something that functions as a *difference-maker*. If some object is determinate in some respect, this determination cannot be *sui generis*. Rather, determination

implies being *determined*, which in turn requires a *determining ground* of which the determination is a *consequence*.

According to traditional rationalist metaphysics in Germany, all determinations require determining grounds, something that makes the determinations possible. In his early metaphysics in the pre-critical period, Kant is enthusiastic about the principle of determining ground. In spite of his rejection of rationalist metaphysics in the critical period, Kant takes over and retains the basic *idea* that the necessarily instantiated determinations must be grounded. Actually, the causal realism is one of the most fundamental assumptions to which Kant adheres in his entire career.

To be sure, Kant does not explicitly use the term ‘determining ground’. But the use of “determine” and its derivative words “determined” (B151), “determining” (B152) and “determinable” (B152) are by no means rare, and even the nominalized phrase “[t]hat which determines” (B153) could also be found. For Kant, “that which determines” and “that which is determined” obviously correspond to ground and consequence. Kant’s use of ground is even more common. Faculties are standardly characterized as “subjective grounds”, which is interchangeable with “subjective condition” or “source”. When Kant speaks of “the affinity of all appearances (near or remote) is a necessary consequence” (A123), the idea of affinity as consequence implies a grounding or consequence relation between ground and consequence.

Now the question is what the determining ground is. Kant’s answer is that the determining ground is the synthesis of transcendental imagination. This answer is not surprising for any reader of Kant. However, the *strategy* of introducing the transcendental function of imagination is striking. Kant’s strategy is first to *specify the role* of determining ground satisfying certain requirements, and then *abduce the entity* that can play the role. Although Kant never makes an official exposition of his strategy, he does in this way introduce the required determining ground in many versions of arguments in transcendental deduction, most notably, in the argument from above, the argument from below, and the argument from perception in B-Deduction.

Although both Hume and Kant are committed to faculty psychology, Kant’s approach is fundamentally different from, and even opposed to, that taken by Hume. This is most evident in Kant’s theory of *a priori* imagination. For Hume, human faculties are uncontroversial and well-established, if something can be explained neither by sense nor by imagination, then it comes to *nothing*. For Kant, by contrast, if something is a fact and it cannot be explained by our known

faculties, then we should instead *introduce new cognitive faculties* to explain it. A faculty is determined in terms of its results which are irreducible to the known faculty.¹⁸¹

5.6.2 Transcendental Imagination

Due to various reasons, Kant concludes that the required faculty as the determining ground of *a priori* determination is (a) imagination, (b) productive, (c) transcendental, (d) successive, and (e) blind. In the following, I will examine how Kant is motivated to determine the nature of the faculty one by one.

(a) The Imagination

According to Kant's idealism, physical objects are reduced into representations. Obviously, these representations are not general, but *particular*. The reduction of physical objects into ideas enables human beings to exercise action upon the sensible particulars, which is consistent with the assumption of mental atheism.

Human cognitive faculties are divided into sensibility, which is defined as a receptive faculty, and understanding, which is defined as a spontaneous faculty. The distinction between sensibility and understanding is drawn in terms of whether its function is free from affection. It is quite natural to suppose that the determining ground of the *a priori* determination should be attributed to understanding. Therefore, the *basic constraints* imposed on the required faculty is that, on the one hand, its action must be spontaneous, and, on the other hand, its objects must be intuitive. The required ground must be a faculty that is both *spontaneous* and *intuitive*.

Traditionally, the paradigmatic faculty that meets the requirements is *intellectual intuition*. In fact, the name of intellectual intuition itself indicates the satisfaction of both spontaneity and intuitiveness requirements. However, the faculty in question must be *human*. As we have shown in Chapter 3, we human beings fall short of intellectual intuition; rather, we are capable only of sensible intuition. And we human beings cannot *create* anything real; we can instead only *determine* the real. Kant holds that both requirements are also satisfied by *imagination*, which is defined as “the faculty for representing an object even **without its presence** in intuition” (B151). As Kant explains in the following passage:

¹⁸¹ For an excellent account of Hume's reductive project see Owen 1999.

Now since all of our intuition is sensible, the imagination, on account of the subjective condition under which alone it can give a corresponding *intuition* to the concepts of understanding, belongs to **sensibility**; but insofar as its synthesis is still an exercise of *spontaneity*, which is determining and not, like sense, merely determinable, and can thus determine the form of sense *a priori* in accordance with the unity of apperception, the imagination is to this extent a faculty for determining the sensibility *a priori*[.] (B151-B152)¹⁸²

In this passage, Kant explains how imagination satisfies both criteria. On the one hand, imagination provides intuition, therefore it is sensible. And, on the other hand, it is an action of spontaneity, therefore it is intellectual. As a result, imagination is viewed as a mediating faculty between the two extremes of sensibility and understanding.

In spite of the above line of justification, Kant's specification of imagination is dubious. It seems that the imagination that produces intuition and the imagination that determines *a priori* is not the same one. The former is constructive imagination, which aims at producing geometrical figures. By contrast, the latter is transcendental or legislative imagination, which performs the function of making the real ordered. Kant's mistake is rooted in the ambiguity of the intuitiveness criterion. What this criterion says is not that the faculty must *produce sensible intuition* from itself, but that the faculty must *take sensible intuition as an object*.¹⁸³

(b) The Productive

There are various kinds of imagination. Kant is still left with the task to determine what kind of imagination or synthesis of imagination can do the job as well as what requirements must the imagination under discussion satisfy. When he first introduces the required faculty in the argument from above, Kant writes:

Thus the transcendental unity of apperception is related to the pure synthesis of the imagination, as an *a priori* condition of the possibility of all composition of the manifold in a cognition. But only the **productive synthesis of the imagination** can take place *a priori*; for the **reproductive** synthesis rests on conditions of experience. The principle of the necessary unity of the pure (productive) synthesis of

¹⁸²Synthesis is attributed to imagination in 1781 *Critique*, and then to understanding in 1787 *Critique*: "Yet the **combination** (*conjunctio*) of a manifold in general can never come to us through the senses, and therefore cannot already be contained in the pure form of sensible intuition" (B129-B130).

¹⁸³In his recent article, Rosefeldt attributes to a twofold epistemic role to imagination. On the one hand, imagination gives understanding the access to real possibility; for instance, the construction of geometrical figures pose further constraints to the metaphysical possibility of a figure in addition to the constraint of logical coherence of the concept. And on the other hand, imagination brings object of sensibility to consciousness. For more details see Rosefeldt forthcoming.

the imagination prior to apperception is thus the ground of the possibility of all cognition, especially that of experience. (A118)

What Kant takes to be a known fact is that our imagination brings *a priori* determination to sensible representation. From the fact that the synthesis of imagination is *a priori* Kant infers that the imagination at issue is *productive*. The line of reasoning is not casual. In the argument from below, Kant employs precisely the same strategy when he writes “[t]he imagination is therefore also a faculty of a synthesis *a priori*, on account of which we give it the name of productive imagination” (A123). The line of the thought of identifying the imagination as productive goes as follows:

- (1) All imaginations are either productive or reproductive.
- (2) All reproductive imaginations are empirical.
- (3) Only productive imagination can be *a priori*.
- (4) The imagination in question is *a priori*.
- (5) The imagination in question is productive.

What kind of imagination is in play presupposes Kant’s complex doctrine of imagination. In §28 of his *Anthropology from a Pragmatic Point of View*¹⁸⁴ Kant offers a more detailed portrayal of imagination:

The power of imagination (*facultas imaginandi*), as a faculty of intuition without the presence of the object, is either productive, that is, a faculty of the original presentation of the object (*exhibitio originaria*), which thus precedes experience; or reproductive, a faculty of the derivative presentation of the object (*exhibitio derivativa*), which brings back to the mind an empirical intuition that it had previously. (AA 7:167)

The power of imagination (in other words), is either *inventive* (productive) or merely *recollective* (reproductive). But the productive power of imagination is nevertheless not exactly *creative*, for it is not capable of producing a sense representation that was *never* given to our faculty of sense; one can always furnish evidence of the material of its ideas. (AA 7:167-168)

¹⁸⁴ Abbreviated as *Anthropology* thereafter.

The power of imagination (in other words), is either *inventive* (productive) or merely *recollective* (reproductive). But the productive power of imagination is nevertheless not exactly *creative*, for it is not capable of producing a sense representation that was *never* given to our faculty of sense; one can always furnish evidence of the material of its ideas. (AA 7:167-168)

According to *Anthropology*, imagination is divided into productive and reproductive one in terms of the temporal relation of its presentation of the object to experience. The object presented by productive imagination is *before* experience, whereas that of reproductive imagination is *after* experience. The inference goes through only if this distinction is mutually exclusive and jointly exhaustive and both empirical and *a priori* imaginations are instantiated.

I would like to remind one point: the distinction between productive and reproductive imagination and the distinction between *a priori* and empirical imagination are *not* co-extensive. To be sure, some passages tempt people to hold that Kant equates *a priori* imagination with productive imagination. A careful reading shows that we should not attribute this view to Kant. What Kant claims is that all *a priori* imaginations are productive, but he never claims that all productive imaginations are *a priori*. Moreover, he suggests that *some* productive imagination is empirical. For instance, from Kant's claim that "the **image** is a product of the empirical faculty of productive imagination" (A141/B181) it is not difficult to infer that this empirical productive imagination is nothing but apprehensive imagination.¹⁸⁵ In his private notes Kant explicitly says that "[t]he productive imagination is either pure or empirical" (AA 23:18). Nevertheless, this further division in productive imagination does not affect the validity of the argument.

The most substantial premise in the argument is (4), which is a trivial consequence of the claim that *a priori* determination is determined *a priori* by its determining ground. The *a priori* determinations are valid indifferently for all objects. Thus, it cannot be affected by any contingent condition initiated by the specific content of experience. In fact, *a priori* determination is nothing but a specification of the essential character of the transcendental path. As the determining ground, the synthesis of imagination is the condition of experience, rather than *conditioned* by experience, which is characteristic of empirical transcendental imagination. Therefore, the apriority of imagination is implied trivially.

¹⁸⁵ For the most detailed discussion of Kant's doctrine of imagination see Kant's notes (AA 23:18). The empirical productive imagination is the synthesis of apprehension which makes perception possible. Reproductive synthesis and apprehensive synthesis of imagination are empirical, whereas the constructive and transcendental synthesis of imagination take place *a priori*.

(c) The Transcendental

By employing the same strategy, Kant continues to write in the argument from above that “we call the synthesis of the manifold in imagination transcendental if, without distinction of the intuitions, it concerns nothing but the connection of the manifold *a priori*” (A118). The same idea is repeated in the argument from below: “insofar as its aim in regard to all the manifold of appearance is nothing further than the necessary unity in their synthesis, this can be called the transcendental function of the imagination” (A123).

Kant is giving the definition of what it is for a synthesis of imagination to be transcendental. Initially, Kant appears to merely state the sufficient condition for the imagination to be transcendental: the synthesis of the manifold in imagination is transcendental *if* it concerns necessary unity or the connection of the manifold *a priori*. I believe that the use of the asymmetrical logical connective “if” is not so much a reflection of the fact that transcendental synthesis is *introduced as a new term* as the intention of *giving merely the sufficient condition of a term*. What Kant has in mind is a definition of transcendental synthesis: the synthesis of the manifold in imagination is transcendental *if and only if* it concerns necessary unity or the connection of the manifold *a priori*.

In fact, Kant does more than giving a definition of what transcendental synthesis of imagination is. Kant further shows that transcendental synthesis is a numerically distinct faculty which is *irreducible* to any other kind of pure synthesis of *a priori* imagination. After he introduces transcendental synthesis in the argument from below, Kant states the peculiarity of transcendental imagination as follows:

It is this apperception that must be added to the pure imagination in order to make its function intellectual. For in itself the synthesis of the imagination, although exercised *a priori*, is nevertheless always sensible, for it combines the manifold only as it **appears** in intuition, e.g., the shape of a triangle. Through the relation of the manifold to the unity of apperception, however, concepts that belong to the understanding can come about, but only by means of the imagination in relation to the sensible intuition. (A124)

Although the relation of apperception to the synthesis can be found in many texts, here Kant explicitly claims that apperception makes the pure imagination intellectual such it is differentiated from pure imagination without apperception. Here Kant’s example of the triangle is illuminating. It indicates that by the merely pure synthesis of imagination what Kant has in mind is the constructing imagination, which determines the mathematical object by constructing it in pure and

empirical intuition. In his pre-critical works, Kant has already found the indispensability of pure synthesis of imagination for pure geometry.¹⁸⁶ The postulation of transcendental synthesis only appears in the critical period and is officially proclaimed in *Critique*. Since the transcendental imagination determines something, rather than constructs a shape in space without making a causal difference, transcendental synthesis cannot be identified with the pure synthesis of constructing imagination, and we should admit it as numerically distinct faculty.

Here the situation is different from the one where Kant determines the productivity of imagination. In determining the productivity, we know that all imaginations are either productive or reproductive, and we know that both of them are instantiated. In determining the transcendental character, by contrast, the line is not that first we know in advance that all *a priori* imagination are either sensible or intellectual, and then we find that the imagination in question falls under the latter category. Rather, after postulating the synthesis of imagination in question, we find that it has a special concern, which is distinct from and irreducible to any other kind known pure synthesis of imagination, and then we give a name to it so as to *individuate* an independent faculty. In short, in the former situation we *determine* the imagination in question, while in the latter situation we *individuate* it.

(d) The Blind

When Kant first introduces synthesis in general in 1781 *Critique*, he makes the following interesting remark:

Synthesis in general is, as we shall subsequently see, the mere effect of the imagination, of a blind though indispensable function of the soul, without which we would have no cognition at all, but of which we are seldom even conscious. (A78/B103)

As the passage indicates, synthesis in general is “blind though indispensable”. The indispensability of synthesis indicates its *explanatory role*, from which one can lay claim to its existence, and thereby it becomes a metaphysical characterization. By contrast, the blindness of synthesis indicates its *phenomenal character* that (1) *synthesis is seldom conscious*. However, this flatly contradicts with Kant’s claim that (2) *synthesis is necessarily conscious* consistently in A-Deduction and in B-Deduction:

¹⁸⁶ See the first section of *Inquiry* (AA 2:276-278).

the mind could not possibly think of the identity of itself in the manifoldness of its representations, and indeed think this *a priori*, if it did not have before its eyes the identity of its action, which subjects all synthesis of apprehension (which is empirical) to a transcendental unity[.] (A108)

Namely, this thoroughgoing identity of the apperception of a manifold given in intuition... is possible only through the consciousness of this synthesis. (B133)

On my interpretation, the inconsistency could be explained away by taking note of the ambiguity of the meaning of consciousness. In claim (1), the consciousness is the non-inferential reflexive consciousness, which simply indicates an epistemic access to some representation. In claim (2), the consciousness is transcendental consciousness, which is ubiquitous in all actions of synthesis and virtually in all my representations.¹⁸⁷

I believe that this epistemic characterization of synthesis as blindness holds for the transcendental synthesis of imagination. One central phenomenal character of the transcendental synthesis of imagination is that we are not reflexively conscious of them, that is, we have no phenomenal knowledge of it. It is not only quite consistent with my suggestion that we *inferentially* know transcendental synthesis of imagination, but it also accords with our ordinary intuition that our mental life is not always reflexive. In most cases we are not conscious of synthesis, since not all representations are clear or even distinct. In order to have the conscious experience of it, one must take great efforts and even make long practice.¹⁸⁸

Another challenge posed on the interpretation is Kant's qualification of the frequency that we are "*seldom*", rather than *never*, conscious of the synthesis. The qualification seems to suggest that at least in some cases we have *non-inferential knowledge* of synthesis. One might wonder in what sense this qualification of frequency should be understood. According to my understanding, it is in simple cases such as drawing a line of describing a circle that we could become reflexively conscious of the synthesis.

The objection resurfaces that the suggestion that we have immediate reflexive knowledge of transcendental synthesis is quite implausible. If we know empirically the existence and the nature

¹⁸⁷ Consider the following text: "This consciousness may often only be weak, so that we connect it with the generation of the representation only in the effect, but not in the act itself, i.e., immediately"(A103-A104); "they did not all together belong to a self-consciousness; i.e., as my representations (even if I am not conscious of them as such) (B132). Therefore, the transcendental self-consciousness is not reflexive, i.e., the transcendental consciousness of something *x* does not entail the knowledge of the knowledge of *x*."

¹⁸⁸ For the need of practice see B1-2.

of transcendental imagination, then why the transcendental synthesis of imagination is postulated only by Kant? Is Kant mentally more acute than anyone such that only Kant has a phenomenal experience of what transcendental synthesis is like? The affirmative answer would be intolerably absurd. One reply is that we could have reflexive knowledge of what is misidentified as something other than the transcendental synthesis of imagination. It is one thing to know what it is like to experience the action, but it is quite another thing to know the nature of the action.

5.6.3 A New Picture of Mind

As a result of the introducing of transcendental imagination, Kant offers a novel picture of human understanding or mind. As Kant writes in a bold manner: “[t]he **unity of apperception in relation to the synthesis of the imagination** is the **understanding**, and this very same unity, in relation to the **transcendental synthesis** of the imagination, is the **pure understanding**.” (A119) By *reducing understanding to imagination*, Kant informs a new conception to the traditional image of mind.

In pre-Kantian German philosophy, understanding or reason is viewed primarily as a faculty of *analysis*. Accordingly, all metaphysical truths are essentially logical or conceptual truths by definition and principle and identity, and thus they are analytic and *a priori*. Kant does not deny the role of analysis; he instead admits that a large portion of truths is analytic. Rather, Kant is claiming that the primary function of understanding is not analysis but synthesis. According to the priority thesis of synthesis to analysis, one cannot analyze unless we synthesize first. In his systematic discussion of synthesis in B-Deduction, Kant elaborates it in detail:

One can here easily see that this action must originally be unitary and equally valid for all combination, and that the dissolution (analysis) that seems to be its opposite, in fact always presupposes it; for where the understanding has not previously combined anything, neither can it dissolve anything, for only through it can something have been given to the power of representation as combined. (B130)

To be sure, the priority thesis is applied to synthesis in general. The primary concern at issue is the synthesis of *the manifold of sensible representation* into one *intuition*, rather than of the synthesis of different simple concepts into a complex one or into a judgment. Kant repeats this idea in many places:

The first pure cognition of the understanding, therefore, on which the whole of the rest of its use is grounded, and that is at the same time also entirely independent from all conditions of sensible intuition, is the principle of the original **synthetic** unity of apperception. (B137)

Understanding belongs to all experience and its possibility, and *the first thing that it does* for this is not to make the representation of the objects distinct, but rather to make the representation of an object possible at all. (A199/B244-245)

The formation of a complex concept does not determine an object. An object can only be determined by a concept if the concept is complete. Even for Leibniz complete concept is peculiar to divinity. Kant also excludes complete concept from the human sphere. On the one hand, we do not originally have a complete concept, and, on the other hand, we cannot make complete concept either by logical means or by intuitive means. Given the generality of partial concept, no matter how many concepts we combine, we cannot use the combination of partial concepts to form a complete concept.

With the change of the conception of mind, the preoccupation of metaphysics is also changed. According to the rationalists, the major if not the exclusive task of metaphysics is to *make the concept distinct*, and it is conducted in virtue of analyzing concept, namely, clarifying the content of the concept. Now the primary job of metaphysics is to *make the object possible* in virtue of the synthesis of the manifold into one intuition, and then to make concepts distinct in virtue of the analysis of the concept. Only if the reference of a concept to object is fixed could the analysis of the concept be possible. Consequently, the intuition of a determinate object is not a brute fact, but an intellectual achievement.

Chapter 6 The Argument from Cognition

6.1 Introduction

The first line of argument I will examine is the one which I call the argument from cognition. Since the argument from cognition is nothing other than “the argument from below” in the A-Deduction, the line of argument is not difficult to be separated from other lines. The argument from cognition runs from A119 to A125, and it could be reconstructed as follows:

(AC1) We have the cognition that is the composite and connected representation.

(AC2) Cognition requires the composition of perception.

(AC3) Cognition requires the connection of perceptions.

(AC4) Cognition requires the affinity.

(AC5) Affinity as consequence implies the transcendental synthesis of the imagination.

(AC6) The transcendental imagination is grounded in categories.

(AC7) The appearances as the objects of cognition are grounded in categories.¹⁸⁹

The argument from cognition consists of four sub-arguments for faculties: the argument for apprehension, the argument for reproduction, the argument for association, the argument for affinity, and then it finally arrives at the conclusion that categories are related to objects. The most fascinating as well as mysterious affinity argument lies in the heart of the four sub-arguments. Furthermore, the argument from below adopts the form of indirect proof, i.e. *reductio ad absurdum*, to achieve its desired conclusion. All of the four sub-argument follow the very suit, and thereby they can be regarded as a *series* of *reductio ad absurdum*. The basic idea of each sub-argument is that the sole passive faculty is *inadequate* for explaining some characteristic essential to the notion of cognition, and therefore some additional active faculty is required to be introduced for the collaboration with sense to yield cognition.

In spite of its tediousness, the argument from cognition gives us many theoretical profits. First of all, among all arguments it is in the argument from cognition that Kant charts the geography

¹⁸⁹ For the proof-structure in A-Deduction and the dependence of the argument from below on the argument from above see Barker 2001.

of mind in greatest detail. Here we have a story that is told in a different way from the famous threefold synthesis. They are not mutually conflicting, but inter-complementary. With the proceeding of argument, a sophisticated model of mind emerges as the psychological background. Second, after his more general criticisms against the empirical path, Kant is continuing his anti-empirical campaign in the argument from cognition by challenging the simple-minded empiricist theory of perception and the arguably empirically adequate association model of mind. Third, Kant shows that his model of mind is formulated not by observation, but by inference, which constitutes a sharp contrast with Hume. And it also shows in what sense his theory is *revisable*. The last but not the least, the world-picture characteristic of the dual modality finds its clearest expression in the argument from cognition. In any other argument centered on synthetic unity Kant never makes it so explicit and powerful. Rather, Kant must make use of the ambiguity of synthetic unity to meet the objective of the Transcendental Deduction.

In section 6.2, in spite of the appearance of the premise of perception, I will propose that the argument from below is an argument from a thick notion of cognition, rather than from perception, and that it is unlikely to be an anti-skeptical argument. On my view, the cognition at issue refers not to judgment, but to intuition. In section 6.3, 6.4 and 6.5, by analyzing the arguments for apprehension, reproduction and association, I will reveal how these arguments that are expected to follow the same logic differ from each other in important respects, and I will give an account of the apparent change of the role of association in both editions of the *Critique*. In section 6.6, I will examine the argument for affinity, which is the heart of Kant's argument from cognition. Through a careful analysis of the modality, I will argue that Kant does not commit any modal fallacy, and that he is committed to the view that necessary connection can only be explained by the necessary instantiation of the connection. In section 6.7, I will further show in what sense the explanatory argument from cognition is an argument from consequence to ground by investigating into Kant's inference to transcendental synthesis and to categories.

6.2 Kant's Notion of Cognition

There are two ways to understand the meaning of the metaphor "below". Understood in the metaphysical sense, the argument from below is the argument from consequence. If so, then all arguments are "from below" in this sense, and "the argument from above" does not make sense anymore. Obviously, this is not the sense in which the argument from cognition is called the argument from below.

In the second sense, the argument from below is the argument from *lower faculty*. In the argument from below, Kant starts his argument by explicitly reminding us that “[n]ow we will set the necessary connection of the understanding with the appearances by means of the categories before our eyes by *beginning from beneath*, namely with what is *empirical*”. (A119) Kant continues: “[t]he first thing that is given to us is *appearance*” (A119-A120).

The argument from below forms a contrast to the argument from above that precedes it in A-Deduction. Kant starts his argument by saying: “Now if we wish to follow the inner ground of this connection of representations *up* to that point (bis *auf* denjenigen Punkt) in which they must all come together in order first to obtain unity of cognition for a possible experience, then we must begin with *pure apperception*.” (A116) As Kant later makes clear, the two “extremes” of “below” and “above” are sensibility and understanding, which refer back respectively to “the manifold of intuition” and to “the necessary unity of intuition” (A124), which are nothing other than the points of the departure of the two lines of arguments. The hierarchy is also confirmed by Kant’s general theory of faculties. As Kant observes in his *Jäsche Logic*¹⁹⁰, sensibility is the lower faculty, whereas understanding is the higher faculty. Therefore, the distinction of the argument from above and the argument from below is drawn in terms of the hierarchy of faculties. The argument from above starts with the pure and intellectual, while the argument from below sets out with the empirical and the sensible. (AA 9:36)

In fact, the label of argument *from* below is inaccurate. To be sure, the argument from below appears to be an argument from perception. For one thing, its first sub-argument starts with the premise that “[t]he first thing that is given to us is appearance, which, if it is combined with consciousness, is called perception” (A119-120). For another, it is evidenced by the occasional formulation of the conclusion in B-Deduction that self-consciousness is indispensable for perception. (B161)

Strictly speaking, however, Kant merely *starts with*, rather than *argues from*, the appearance or the empirical consciousness of it. With the unfolding of the argument, it turns out that it is not the weaker conception of perception, but the stronger conception of cognition, on which the entire course of argument is premised.¹⁹¹ The correction of the initial impression stems from the following facts. First, the argument from below consists of a series of *reductio ad absurdum*. The explicit point of departure does not exhaust all premises that are employed in the argument. In the course of his introduction of *reductio* assumptions, Kant in effect adds new premises to his argument,

¹⁹⁰ Abbreviated as *Logic* thereafter.

¹⁹¹ The virtual argument from perception is contained in the second half of B-Deduction. It will be discussed in Chapter 9, which bears striking resemblance with, or even possibly originates from, this argument from below.

and betrays his commitment to our possession of cognition. Second, the A-Deduction might differ from B-Deduction, so does the conclusion in the B-Deduction.

Since the entire argument is premised on the notion of cognition, we have to examine what cognition is for Kant. Kant has various definitions or specifications of cognition, which could roughly be divided into two groups. In §1 of the *Logic*, Kant writes “[a]ll cognitions, that is, all representations related with consciousness to an object, are either *intuitions* or *concepts*”. (AA 9:91) In effect, Kant offers one intensional definition that cognition is the conscious representation of an object and one extensional definition that cognition is either an intuition or a concept.

These two definitions of cognition could also be found in the *Critique*. In his *Stufenleiter* in Dialectic, Kant offers a systematic exposition of cognition in the taxonomy of representations:

The genus is **representation** in general (*repraesentatio*). Under it stands the representation with consciousness (*perceptio*). A **perception** that refers to the subject as a modification of its state is a **sensation** (*sensatio*); an objective perception is a **cognition** (*cognitio*). The latter is either an **intuition** or a **concept** (*intuitus vel conceptus*). The former is immediately related to the object and is singular; the latter is mediate, by means of a mark, which can be common to several things. (A320/B376-377)

Extensionally, cognition is a genus of intuition and concept; intensionally, cognition is an objective perception. As Kant indicates, “objective” means “related to object”, and “perception” refers to “conscious representation”. Therefore, the objective perception is the conscious representation of object, which is consistent with that given in the *Logic*.¹⁹²

The other characterization of cognition is focused on the notion of connection and rule. In §5 of the *Anthropology*, Kant introduces the notion of cognition in the context of the distinction between distinctness and confusion. (AA 7:138)¹⁹³ Kant writes that “an aggregate of representations becomes knowledge, in which order is thought in this manifold, because every conscious combination presupposes unity of consciousness, and consequently a rule for the combination.” Then, Kant continues: “In every complex representation (*perceptio complexa*), and thus in every cognition (since intuition and concept are always required for it)”.

Kant obviously identifies cognition as *complex representation* or complex perception. From what follows we can see that complex representation is composed of (a) the aggregate of the part-

¹⁹² In the following I will use cognition and objective representation interchangeably.

¹⁹³ In this context, Kant’s view is startling in that he proposes an ontic rather than an epistemic reading of clarity and distinctness of representation. I think that overwhelming textual evidence indicates that epistemic reading is Kant’s more usual view, and we should also understand along this route.

representations, (b) the combination of the part-representations, (c) the rule of combination, or “the order according to which the partial representations are combined. The order is either a logical division or real one” (AA 7:138).

This portrayal could also find itself in the *Critique*. In the second section of A-Deduction, Kant offers a definition of cognition as “a whole of compared and connected representations” (A97). Since this definition makes an appearance in the preliminary to the argument in A-Deduction, it seems to be the conceptual preparation that is supposed to play a role in the subsequent argument. The comparison and connection are correspondent respectively to the logical division and the real division in the account of cognition in the *Anthropology*.

The striking feature of this definition is that Kant defines cognition with reference to representational mereology. Cognition is a whole-representation, and naturally it is composed of part-representations, which stand in the relation of comparison and connection. In a nutshell, cognition is essentially *composite* and *structured*. As we will see in the course of analysis, the facts (such as composition, combination, and rule) that unfold themselves are precisely contained in the conception of cognition.

A crucial question is what cognition refers to when Kant talks about it. Since the notion of cognition is generic, it seems that there are many candidates. I propose that the cognition in the context of the argument from below should be *identified* with intuition, or the unity conception of intuition. Kant discusses this after his introduction of synthesis in §10. Two initial objections to this proposal soon appear. A first objection is that intuition is an ingredient of cognition, rather than cognition itself. A second objection is that, according to *Stufenleiter*, cognition is broader than intuition, so all intuitions are cognitions, but not all cognitions are intuitions. The first objection is disarmed by the second objection. Kant explicitly says that intuition is a species of cognition. According to Kant’s *Stufenleiter*, cognition is objective perception, and the genus cognition has two species: intuition and concept. Here, intuition is identified with cognition. As for the second objection, one might reply by saying that the primary sense of cognition is intuition. Although in A-Deduction Kant does not explicitly say that cognition *is* the intuition with unity, I think that there is a compelling reason for this identification. Kant’s account of the *generation* of a cognition and that of the *building* of one intuition bear striking similarity. As Kant indicates in the last paragraph, “**manifold**”, “**synthesis**” and “**unity**” are the three conditions that are separately necessary and conjointly sufficient for the cognition of the object. It is even confirmed by Kant’s discussion of synthesis in general at the beginning of §10: “[b]y **synthesis** in the most general sense, however, I understand the action to put different representations together with each other and to

comprehend(*begreifen*) their manifoldness in a cognition.” (A77/B103) The intuition is likewise characterized. In §10 Kant gives the specific sense in which intuition could be identified with cognition. The built intuition consists of “different representations”, “synthesis”, and “unity”. *One* intuition is the unity of the synthesis of the manifold of representations.¹⁹⁴

This identification runs counter with the general impression that Kant equates cognition with judgment, which is confirmed by numerous texts written in both pre-critical and critical periods. Based on the collaboration thesis, a long-standing mistake is to attribute to Kant the view that the combination of a concept and an intuition is always a judgment.¹⁹⁵ We do not know what Kant’s ultimate position is with regard to the issue of whether cognition must take the form of judgment. I think that it is more profitable to adopt a liberate view on the form the cognition takes. The judgment is one species of the objective representation whose peculiarity lies in its claim to *truth*. Therefore, I think that this argument from cognition is numerically distinct from the argument from judgment, and discuss them in two distinct chapters.

The notion of cognition appears much thicker than that of perception. It is quite natural to worry that Kant’s argument from cognition might beg the skeptics’ question.¹⁹⁶ This kind of objection that the argument from cognition tacitly assumes that the primary, if not exclusive, concern of Transcendental Deduction is to refute skepticism. However, why should we accept this assumption? If one abandons the idea that Kant’s argument in Transcendental Deduction should be evaluated in terms of the prospect of anti-skepticism, few would embrace the view that the argument from cognition is anti-skeptical. As long as we do not adopt the anti-skeptical reading, the objection of begging the question immediately disappears.

To be sure, this does spare one the effort to reply to the worry whether it is anti-skeptical. It does not imply, however, that this argument is not controversial. Rather, a new substitutive worry is that the argument from cognition has no polemical force. Soundness does not exhaust all the virtues one argument could have. Even if this argument is valid and even sound, this argument still could be pointless. Then, what is the point of Transcendental Deduction? As I have suggested, my alternative is that the Transcendental Deduction is explanatory in nature. What misleads people is that its metaphysical character is dwarfed by its pervasive and extravagant representational language.

¹⁹⁴ For more details about the notion of unity see Chapter 8.

¹⁹⁵ Hanna attributes to Kant the view that the product of the threefold synthesis is an explicit judgment. See Hanna 2001, 45-53. I think that this move runs counter to Kant’s remark concerning the first product of human cognition and distorts the entire picture of *Critique*.

¹⁹⁶ This point is repeatedly made by Guyer, especially in his 1987.

The argument from cognition aims to give a metaphysical explanation of the objective representation, which should be seen not as a brute fact, but as our intellectual achievement.

Even if it is conceded that the Transcendental Deduction in general and the argument from cognition in particular is not anti-skeptical, it does not license the cognition to figure in the premise of the argument. It could be the case that the peculiar conception of cognition is invented by Kant for the sake of meeting the requirement of argument. Besides Kant and his argument, neither will the notion of cognition be acknowledged by other philosophers, nor will it be of any use.

As I understand it, Kant uses the thick conception of cognition in a manner that it never occurs to him that it could be controversial. This is evidenced by the fact that cognition does not only appear in the revolutionary *Critique*, it also appears in his much less controversial *Anthropology* and *Logic*. It suggests that the notion of cognition is *presupposed* by the transcendental philosophy and accepted by the philosophical community. Indeed, the idea of representational mereology is alien to us, but it is not unfamiliar to Kant and his contemporaries. It could be found in Leibniz that every perception consists in a unity of manifold.¹⁹⁷ It is not surprising why it is taken for granted by Kant.

6.3 The Argument for Apprehension

The Apprehension Argument could be reformulated as follows:

(AC1.1) Assume for *reductio* that appearance is given to us without reference to any active faculty and its action.

(AC1.2) Every appearance contains a manifold.

(AC1.3) Perception is appearance combined with empirical consciousness. (Definition of Perception)

(AC1.4) from (AC 1.2) and (AC 1.3) that every perception contains a manifold and thus is dispersed and separate.

(AC1.5) (AC 1.4) is false.

¹⁹⁷ For a discussion of the unity of perception see Puryear 2006. In fact, this is nothing but the precursor of Kant's famous notion of synthetic unity, which will be discussed in detail in next chapter.

(AC1.6) from (AC 1.5) (AC 1.1) is false. A combination of perceptions is necessary. (Assumption Discharged)

(AC1.7) from (AC 1.5) and (AC 1.6) there is a combination of these perceptions.

(AC1.8) from (AC 1.7) there is an active faculty of the imagination and thereby an action of the apprehension is essential to perception.

This first sub-argument adopts the strategy of *reductio ad absurdum*. The success of the *reductio ad absurdum* relies heavily on whether the assumption can entail a contradiction with some accepted truth. The apprehension argument can be divided into two halves according to whether the introduced assumption for *reductio* is discharged or not. The first half runs from (AC1.1) to (AC1.6), which is intended to show that appearances cannot be simply given to us without being combined. And its second half runs from (AC1.7) to (AC1.9), which is intended to show that the required function of combination should be assigned to the faculty of the imagination. The apprehension assumes that composition is essential to the notion of cognition. In the following I will examine and evaluate the two parts of apprehension argument.

Let's begin with the *reductio* assumption. The assumption for *reductio* says that appearance is given to us without reference to any active faculty and its action. The assumption for *reductio* introduced often can be construed as implicitly targeted at some polemical position. It might be proposed that Kant intends to argue against *radical sensationalism* and thus *the monism of epistemic source* that only sense could *give* us representations. One might wonder, however, whether there is anyone who has ever endorsed such a radical position. Classical empiricists, most notably Locke, are also adherent to *the dualism of epistemic source*. According to Locke, all ideas are either those of *sensation* or those of *reflection*, though reflection is identified with inner sense.¹⁹⁸

It is more reasonable to suppose that Kant does not argue that only sense can give us perception, but that sense can provide perception independently from the spontaneous faculty. This thought naturally leads to the proposal that Kant intends to argue against the *non-conceptualism of perception*, where perception is understood in the Kantian sense. This reading is also problematic. Even if Kant is committed to some version of conceptualism, it is not immediately clear that what is presented in the Apprehension Argument by itself is adequate to establish this view. It is equally

¹⁹⁸ In Kant literature, the evaluation of the two-faculty theory of mind or of the two-source theory of cognition does not reach consensus. For the novelty of distinction see Henrich 2008, sensation and cognition can be reduced to each other. For the banality of the distinction see Falkenstein 2004.

not clear that the involvement of any mental activity in the supposedly passive reception of impressions is *equivalent to* any version of conceptualism of perception, either the state-conceptualism or content-conceptualism.

A middle way drawn between the two previous proposals is to suggest that Kant intends to discard *the traditional model of perception* that perception is literally *sense-perception* in favor of the view that the generation of perception must be with reference to the imagination. In fact, this proposal is confirmed by the famous note in A120: “No psychologist has yet thought that the imagination is a necessary ingredient of perception itself.” (A120f) The third proposal seems to be stronger than the first yet weaker than the second, for it does not only affirm that human beings have the imagination as a faculty distinct from sense, but also asserts that the imagination is necessarily involved in perception. Therefore, Kant does not argue for the *existence* of a distinct active faculty, namely, the imagination, but for the *involvement* of the imagination in perception. This amounts to assigning a new function to the imagination.

The line of the first half of the apprehension argument roughly runs as follows: perception is the empirical consciousness of appearance. Now since every appearance contains a manifold, it follows that perception contains a manifold. Without any involvement of synthesis, perceptions would be dispersed and separate. Then, Kant concludes that “a combination of them, which they cannot have in sense itself, is therefore necessary” (A120).

The problem of this argument is that it is not clear why dispersed and separate perceptions cannot be accepted, and on what account Kant makes the inference from (AC1.4) to (AC1.5). It is tempting to attribute to Kant the fallacy of *non-sequitur*. Of course, this would be an uncharitable reading of Kant. One way to circumvent this objection is to maintain that Kant makes a valid argument, yet he merely fails to make explicit some premise. In order for the argument to go through, the hidden premise must be uncovered. At the end of this sub-argument, Kant betrays his implicit commitment when he writes that “the imagination is to bring the manifold of intuition into an **image**” (A120), and that “it must therefore antecedently take up the impression into its activity”. It suggests that we have the image of an object which contains a combination of perceptions. Only if the fact that perception is essentially composite is granted, the implication that perceptions are dispersed and separate is contradicted. Consequently, the assumption for *reductio* is successfully discharged. Note that Kant does not make use of the notion of cognition; rather, what he draws on is the peculiar notion of image.¹⁹⁹ While we are not previously informed of what the

¹⁹⁹ If one does not cling closely to the text in the first sub-argument, he could suggest that a combinatory notion of cognition has already been introduced before the argument starts off when Kant writes in the preliminary part: “If every individual representation were entirely foreign to the other, as it were isolated and separated from it, then there

notion of image means, we inferentially know that image must be something that implies the composition and connection of representations, and perhaps something else.

The inference (AC1.4) to (AC1.5) could be spelled out as follows:

- (1) (AC1.1) implies (AC1.4)
- (2) We have the image of an object which is combined.
- (3) (AC1.4) contradicts with (2).
- (4) (AC1.1) is false.

Now let us come to the second half of the argument. When Kant remarks that a combination is necessary for the “dispersed and separate” (A120) perceptions, it immediately leads to the conclusion that there is a distinct active faculty of the imagination in general and the action of apprehension in particular. If the line of reasoning is taken literally, Kant is again guilty of the fallacy of *non sequitur* in his inference from (AC1.7) to (AC1.8). We must refrain ourselves from attributing a *non sequitur* objection to Kant and attempt to uncover some hidden premises beneath the argument. While the required premises are not made explicitly in the main text, they are hinted in his famous footnote:

No psychologist has yet thought that the imagination is a necessary ingredient of perception itself. This is so partly because this faculty has been limited to reproduction, and partly because it has been believed that the senses do not merely afford us impressions but also put them together, and produce **images of objects**, for which without doubt something more than the receptivity of impressions is required, namely a function of the synthesis of them. (A120f)

This footnote helps us to formulate a negative argument by elimination to close the inferential gap between (AC1.7) and (AC1.8):

would never arise anything like cognition, which is a whole of compared and connected representations.” (A97) This hasty route of justification is obviously not desirable and not adopted by me, though it turns out that cognition is in effect premised.

(N1) A combination is necessary for objective representation and it requires perceptions not to be dispersed and separate.

(N2) The combination is attributed either to sense or to the imagination.

(N3) Sense does not provide any combination.

(N4) The combination is attributed to the imagination.

(N5) The reproductive imagination cannot do this job.

(N6) It must be some action in the imagination other than reproduction that exercised immediately on perception.

(N7) Apprehension can be designated to this distinct action of the imagination.

The basic idea of the negative argument is that Kant argues against the two alternative views on faculty attribution. Kant points out that there are *different conceptions of sense* that are relevant to the validity of the argument. For instance, some contend that sense itself has “a function of synthesis” (A105). Kant firmly rejects this conception of sense. It seems that Kant’s notion of sense is conceptually delineated from any activity and synthesis. Accordingly, Kant seems to be tacitly committed to an *empiricist conception of sense*, which is characterized by pure passivity. With this particular conception of sense at hand, Kant infers that the function of the combination of sensible representations can only be *attributed* to the faculty of the imagination, as a species of the genus of sensibility, rather than to sense, as the other one.

Even if the combination is attributed to the imagination rather than to sense, at most it shows that the first half of the conclusion (AC1.8) follows that there is an active faculty of the imagination, and the latter half does not thereby follow that there is an action of apprehension. In order for the latter half to follow, an additional argument for apprehension must be provided. Kant maintains that the imagination “*has been* limited to reproduction” (A120f). It implies that it *has been well-known* what it means by reproduction and it is *widely recognized* that reproduction is attributed to the imagination. On the one hand, reproduction is concerned with recalling the past representations, and reproduction is exercised *between* perception, rather than *within* perception. On the other hand, the required action is characteristic of being “exercised *immediately* upon perceptions” (A120). As a result, Kant concludes that the required action is *numerically different from* reproduction. The order of inference is critically important. Only if reproduction has been definitely delineated and correctly

understood can it be concluded that reproduction does not do the required work of taking impression into perception.

As Kant observes, the reason why no psychologist has ever made this discovery lies in that either they *deflate* the imagination with reproduction due to the prejudice toward the imagination, or they *conflate* sense with the imagination due to the misconception of sense. In other words, the apprehension of the imagination, on the one hand, must not be assimilated into the reproduction of the imagination, and, on the other hand, it must be distinguished from sense. The conclusion is that the synthesis of apprehension is neither conflating sense nor deflating the imagination.

This line of argument is of vital methodological importance. It displays exactly how some mental faculty is introduced to close the explanatory gap for objective representation.²⁰⁰ The general pattern of this methodology is first to identify some observational and conceptual requirement, and then to postulate the relevant faculty to satisfy these requirements.²⁰¹ It also displays that for the previously postulated and widely accepted faculty this kind of argument is able to determine the role of the faculty in question and clarify its relation to objective representation.

6.4 The Argument for Reproduction

The second sub-argument is the most compact yet the least similar to the general pattern of the argument *ad absurdum*. The second sub-argument starts with the seemingly concluding sentence that “this apprehension of the manifold alone would bring forth no image” (A121). Nevertheless, the widespread use of the subjunctive mood and their negations indicate that it is plausible to reconstruct this argument by adapting it to the general model of *reductio ad absurdum* as follows:

(AC2.1) Assume for *reductio* that apprehension of the manifold is *the only subjective* ground for cognition.

(AC2.2) No *connection* of representations can arise.

(AC2.3) (AC2.2) contradicts with a fact.

(AC2.4) (AC2.1) is false. (Assumption Discharged)

²⁰⁰ The entire chain of inference shows precisely how apprehension as a theoretical entity is introduced and individuated in the course of argument.

²⁰¹ For more details see 5.7.

(AC2.5) there is some subjective ground other than apprehension, i.e. the empirical faculty for reproduction.

The basic idea of the reproduction argument is that merely the apprehension of the imagination is inadequate for objective representations and something else must be introduced. Exactly like the first one, the second sub-argument does not explicitly separate the premise either, with which the assumption for *reductio* contradicts. Since Kant claims that “this apprehension of the manifold alone would bring forth no image”, the missing premise is again that we have the image of object. In order to make the *reductio* strategy work, the missing premises that are abducted from the peculiar notion of *image* is “connection of the impressions” (A121). In order to explain the connection of impressions, we must believe that the faculty of reproduction is involved in generating the image of an object.

In the apprehension argument, it has been shown that the faculty of the imagination is liable to be deflated with the function of reproduction, and it has also been revealed that only if the notion of reproduction is clearly delineated can apprehension be individuated. Since the main purpose there is to highlight the distinctive role of apprehension, it suffices to say what reproduction *is not*. Now in the argument for reproduction it is time to say what it *is* here.

As a matter of fact, the mind must transit from one state to another state. The faculty of reproduction does nothing other than call back a representation to the succeeding one to make this transition possible. The reproductive imagination is characterized as *subjective* ground and *empirical* faculty. It is safe to suppose that this characterization is also true of apprehension, though Kant does not make it explicit. Whereas both apprehension and reproduction are the subjective grounds for the generation of an image of object and they are “inseparably combined” with each other, Kant maintains that they perform distinct functions: apprehension makes *perception itself* possible while reproduction makes the “*series of perception*” (A121) possible, and that the former is presupposed by the latter.

Unlike the apprehension in the first sub-argument, in the second sub-argument the introduced reproductive imagination needs not to be individuated. Kant takes it to be an uncontroversial view that reproduction is essential to the function of the imagination. Kant does not make any effort to identify that the reproduction of past representations should be attributed to the imagination, as he does for the apprehension of the imagination. What Kant does is merely to clarify that it is the

faculty of the reproductive imagination to perform the function of exhibiting the entire series of perceptions and forging connections between them.

Moreover, Kant makes a different point in the reproduction argument. If we take seriously what the footnote says of reproduction, the point of this argument is *not* to introduce reproduction, for both *the function of reproduction* and *its attribution to the imagination* have already been taken as widely recognized. It is *not* the fact of the transition of mind from one perception to another that makes reproduction a useful theoretical postulate. Rather, the point of the argument is to establish that the transition of mind and thus the *connection* of perceptions is indeed *required* by the image of an object, or by objective representation. As long as this link is established, the involvement of reproduction naturally follows.

Again, we are confronted with the embarrassment: Kant does not give an articulated definition or any informative illustration of what an image is. What we are doing is just to *read the missing premise back* into the notion of image, with the conviction that the arguments should and must be valid. In spite of this, it cannot be mistaken that a thick premise concerning image or objective representation is *assumed*, rather than *argued for*, by Kant. Any anti-skeptic reading flatly contradicts with what the text exactly says. What is faulty is not the modest goal of the argument, but the ambitious interpretation of it. The bonus of the argument is that the notions occurring in premises and in conclusion and their relationship are clarified. We come to know why some theoretical entities are introduced, what roles they play, and how certain facts are correlated.

6.5 The Argument for Association

The association argument could be formulated as follows:

(AC3.1) Assume for *reductio* that representations reproduce one another arbitrarily.

(AC3.2) There would be no *determinate* connection, and therefore no cognition would arise.

(AC3.3) However, cognition does arise.

(AC3.4) (3.1) is false. (Assumption Discharged)

(AC3.5) Representations reproduce another in accordance with a rule.

(AC3.6) The subjective and empirical ground of reproduction with a rule is association.

6.5.1 The Consistency and the Strength of the Premise

The basic idea of the sub-argument is nothing new, and the argument identifies another element for the generation of cognition. However, there are two differences between this sub-argument and the previous two arguments. First, Kant's presentation of the argument for association explicitly exhibits the design of an argument *ad reductio* that spares us the effort of reconstruction. Second, it is in the third sub-argument for association that the notion of *cognition* or objective representation makes its first appearance and functions as the premise that discharges the assumption for *reductio*. In the third sub-argument, Kant explicitly claims that the unacceptable consequence is that "no cognition at all would arise" (A121). In the first two sub-arguments the discharger of the assumption for *reductio* is *image*. Kant remarks respectively that "the imagination is to bring the manifold of intuition into an image" (A120), and that "this apprehension of the manifold alone would bring forth no image" (A121).

It is not clear whether the notion of image is synonymous with, or at least, co-extensive with that of cognition or objective representation. The issue is difficult to settle down. While *image* (*Bild*) as the cognate of the *imagination* (*Einbildungskraft*) seems to suggest that the imagination is supposed to be the source or ground of image, we are not informed whether the imagination is taken in itself or with reference to apperception. In other words, we do not know whether the imagination as the source of image includes the transcendental imagination or not. If it is, then image is co-extensive with objective representation. If not, then being image is necessary but not sufficient for being objective representation. In either case, being image includes a subset of the necessary conditions of being cognition or objective representation.

If being image is not equivalent with cognition, it implies that the image-centered premise in the argument for apprehension and that for reproduction does not play any part in the third argument for association. Accordingly, the premise for discharging the assumption for *reductio* is inconsistent throughout these sub-arguments. In order to make the three sub-arguments *unified into one story with one uniform premise*, it is well-motivated, though not required, to assume that image is equivalent with cognition, and all of the sub-arguments are arguments from *cognition*. Even if we concede that cognition does not play any role in the first two sub-arguments, it does nothing but defer the introduction of objective representation to a point where it cannot be delayed anymore. This point is precisely the following argument for affinity. Fairly speaking, it is just a matter of time to introduce objective representation as the premise of the argument.

Previously, the obscure notion of image leaves room for suggesting that skepticism might accept it as unproblematic, and that this argument has the potential to be anti-skeptical. With the introduction of cognition, no doubt could be cast on the view that the argument from *cognition* assumes, rather than argues for, our possession of cognition.

One might wonder whether cognition implies determinate connection. According to Kant, connection is a necessary condition for cognition. The question is what Kant means by determinate connection. The determined or determinate connection means that a representation is connected “with one representation rather than with any others” (A121). The claim that the representation that follows the antecedent one is determined amounts to saying that there is a *necessary connection* between representations. If a representation is followed by its succeeding representation arbitrarily, the succession would not even be constant, not to mention necessary.

If this interpretation of determinate connection as necessary were correct, then a surprising conclusion would follow: if Kant’s argument is meant to provide an alternative to Humean Mosaic, up to this point the sheer association without further condition is adequately strong to yield the conclusion that there exists necessary connection. Even in this case, Kant could not level genuine refutation of Hume, since both of them do not share a common premise.

Kant has already shown how he differs from Hume with respect to the necessary connection. Then, one might wonder what the point of the following fourth sub-argument for affinity is. If Kant does have a point in his following sub-argument, it could be expected that his view on necessary connection is far more radical than Hume could imagine.

6.5.2 The Faculty of Association Identified

In the conclusion of the third argument, Kant identifies the subjective and empirical ground as association. Like reproduction, Kant takes association as uncontroversial, and he does not bother himself to make the justification for it. In what follows I would like to clarify the nature of association, which is of considerable importance to understand Kant’s theory of mind in general. In the argument from cognition, the sub-argument for association is technically separated as one paragraph, and it seems to imply that association is an independent faculty that is irreducible to any other faculty. In some place, Kant’s explicit juxtaposition of association with other faculties strengthens the impression; for instance, Kant writes:

On them is grounded, therefore, all formal unity in the synthesis of the imagination, and by means of the latter also all of its empirical use (in recognition, reproduction, association, and apprehension) down to the appearances, since the latter belong to our consciousness at all and hence to ourselves only by means of these elements of cognition. (A125)

In other places, however, it seems not to be the case. Since the third sub-argument association is defined as “reproduction in accordance with rules”, it seems to suggest that association is a *species* of reproduction. If it is correct, then in this third sub-argument does *not introduce* a new kind of the action of the imagination of association and assert that it is essentially involved in generating objective representation. Rather, Kant further *specifies and determines* the previously introduced reproduction, and what he introduces is precisely the notion of *rules* as the differentia of the genera of reproduction. Kant’s use of association often makes reference to rules or laws. For instance, Kant writes that the synthesis of “the **reproductive** imagination is subject solely to *empirical laws, namely those of association*[.]” (B152) When Kant is talking about association here, he is talking about *reproduction with rules*.

This proposal is supported by the following observation. When Kant introduces reproduction, Kant says that without reproduction apprehension “would not bring forth image”. Only in collaboration of reproduction is it possible for apprehension to yield image or cognition. Kant does *not* say that reproduction is a ground of apprehension. In the famous threefold synthesis section, Kant does not identify reproduction as the ground of apprehension, either. When Kant claims that “[t]he synthesis of apprehension is therefore inseparably combined with the synthesis of reproduction” (A102), what he is suggesting seems to be merely that both apprehension and reproduction are necessary for the generation of cognition. When it comes to association, Kant explicitly identifies association as the ground of the reproduction, though the latter is not *a priori*.

This is further evidenced by the striking fact that in Kant’s argument from cognition association is the only one among these four elements constituting the objective representation that cannot find any counterpart in threefold synthesis in A-Deduction. In the threefold synthesis, Kant introduces association precisely *in* his discussion of reproduction, rather than distinctly separates it. Probably it confirms the above proposal that association is not an entirely new kind of function of imagination, but the previously familiar notion of reproduction with reference to rules.

6.5.3 An Argument without Reproduction and Association?

In A-Deduction, apprehension, reproduction, association and apperception are necessary for cognition.²⁰² The above analysis has shown how reproduction and association are incorporated into the account of cognition. However, Kant seems to hold a radically different view of what role reproduction and the laws of association play in B-Deduction. In B-Deduction, reproduction and association do not play any positive role in any version of Kant's argument. Indeed, their sudden disappearance is one of the most mysterious things in entire B-Deduction. For instance, his argument from perception in § 26 is inspired by the argument from cognition in A-Deduction. However, in this argument both reproduction and laws of association do not make an appearance. Kant instead argues *directly* from apprehension to apperception.

In B-Deduction the reproductive imagination and laws of association play a new, and negative, role in Kant's argument: they are introduced to form a *contrast* with Kant's positive apparatus in his arguments. In Kant's argument centering on judgment, the reproductive imagination and the laws of association are introduced to form a *contrast* with the objective judgment. In § 19, for instance, Kant writes that “**a judgment**, i.e., a relation that is objectively valid, and that is sufficiently distinguished from the relation of these same representations in which there would be only subjective validity, e.g., in accordance with laws of association” (B142).

In addition, Kant contrasts the reproductive imagination also with the transcendental imagination in many places in his argument from perception. For instance, in § 24 reproduction is mentioned in order for us to be in a better position to appreciate the productiveness of the transcendental imagination:

the **reproductive** imagination, whose synthesis is subject solely to empirical laws, namely those of association, and that therefore contributes nothing to the explanation of the possibility of cognition *a priori*, and on that account belongs not in transcendental philosophy but in psychology. (B152)

Here Kant suggests that the reproductive imagination *has nothing to do* with transcendental philosophy. If we take this claim seriously, it means that reproduction and association are no longer essential to Kant's explanation of cognition. Note that this conclusion is not mundane. Since that both apprehension and reproduction/association are empirical in character, it is obvious that they do not make any contribution to pure cognition. I believe that that here *a priori* cognition could be harmlessly understood as the *a priori* aspect of empirical cognition, namely, the form of cognition.

²⁰² Even in A-Deduction the reproduction does not always make an appearance.

Therefore, it seems that Kant assigns radically different roles to reproduction and association in both editions of the *Critique*. In A-Deduction, reproduction and association are indispensable ingredients for making possible the empirical cognition of objects. In B-Deduction Kant seems to change his mind. Reproduction and association are introduced not *as* the necessary condition for cognition, but for providing a sharp contrast with the necessary condition of cognition.

It can hardly be denied that there is a change in Kant's presentation throughout A- and B-Deduction. The question is how we should evaluate such a change. It could be argued that Kant's theory of synthesis for objective representation is inconsistent between A- and B-Deduction. In 1787 *Critique* Kant does think that reproduction and association are not involved in the generation of cognition. On this issue, B-Deduction marks a great improvement of the A-Deduction. This reading is uncharitable to the coherence of Kant's theory. A more charitable response is to argue that Kant's theory of synthesis for objective representation is consistent. One could suggest that what Kant claims in B-Deduction is not that reproduction *literally* is not involved in the explanation of objective representation, but that it does not contribute to the explanation of the *a priori* aspect of objective representation. Therefore, in A-Deduction reproduction and association falling under the psychological category are included in a *complete* explanation, since they do play a role in generating cognition. In B-Deduction, by contrast, they are excluded from a *proper philosophical* explanation, since it has nothing to do with transcendental philosophy, Kant inhibits himself from talking reproduction and its associative rules.

Therefore, Kant does not change the *content* of the doctrine of cognition. One might propose that in B-Deduction Kant has a better comprehension about, or a more precise formulation of, the *nature* of the enterprise he undertakes. Hence, Kant delineates a clear-cut line between philosophy and psychology and relegates reproduction and association into psychology.

It is often believed that Kant finds the A-Deduction too psychological, and therefore he rewrites it in the 1787 *Critique*. The psychologism charge is famous, but it is also little appreciated. The psychologism charge is *not* targeted at Kant's *broadly mentalist approach* characterized by the pervasive appeal to mental representations and faculties. As I have argued in Chapter 5, once the Copernican revolution is launched, Kant has to be committed to idealism, schematism and psychologism. To circumvent psychologism charge is not simply to *reduce* the appeal to representations and faculties in number or in frequency. Otherwise, B-Deduction is still plagued with psychologism, though merely to a lesser degree. Rather, to avoid psychologism charge means something specific and strong: it is to *eliminate* the appeal to *psychological explanation*. This move has twofold meanings. On the one hand, reproduction and laws of association are regarded as

belonging to psychology rather than to philosophy. Therefore, reproduction and laws of association are eliminated from the inventory of explanatory resources. On the other hand, the psychological fact of perception could nonetheless be employed as the empirical premise for the argument, for they are not the *explanans*, but the *explanandum*.

One could argue for Kant's consistency from a different angle. What preoccupies Kant is the *proof* of the objective reality of categories, not the *theory of mind* itself. While Kant has to make use of different theoretical resources for the demonstration of the reality of categories, this does not oblige him to elaborate the background theories which he takes as a tool. To provide a *complete description* of all the elements is not Kant's primary concern. What concerns Kant most is instead the entailment of the conjunction of the objective representation and the manifold of sensibility.

Suppose that the change in B-Deduction is a simplification, verbally or substantially, of the theory of synthesis in A-Deduction. It is theoretically profitable to make such a simplification. The more *informative* a theory is, the more risks it takes. Kant would make a *more general* and *less risky* conclusion that there must be *some* activity to synthesize all the manifold into a unity and it does so in accordance with *some* rules. The revision of the theory of synthesis indicates the theoretical nature of the Kant's conception of synthesis. It is open to empirical and philosophical considerations and is susceptible to theoretical modification and even transformation.

6.6 The Argument for Affinity

In the argument for association it is concluded that representations instantiate *determinate connection*, i.e., representations are necessarily connected. If Transcendental Deduction intends to prove that there exists a necessary connection in the world, then the association argument should have achieved its aim and Deduction should be completed here. However, Kant shows that it is not the end of the Deduction, and he puts forward the argument for affinity, which turns out to be the heart of the argument from cognition.

In order to keep neutral, I will first use Kant's own language and design to reiterate the argument, then abbreviate the argument in my own language. Kant's argument for affinity runs as follows:

(AC4.1) Assuming that association does not have objective ground.

(AC4.2*) Appearances can only be apprehended by the imagination under the condition of a possible synthetic unity of this apprehension.²⁰³

(AC4.3*) Therefore, it would also be entirely *contingent* whether appearances fit into a connection of human cognitions.

(AC4.4) It *would* still remain in itself entirely *undetermined* and *contingent* whether the perceptions were also associable.

(AC4.5) Therefore, it would be possible that empirical consciousness does not belong to one consciousness.

(AC4.6) However, it is necessary that all empirical consciousness is encompassed in one self-consciousness.

(AC4.7) (AC4.5) is false. (From AC4.6)

(AC4.8) Therefore, association has the objective ground of association, namely affinity.
(Assumption Discharged)

6.6.1 Terminological Clarification

The basic idea of the argument for affinity is quite clear. Kant suggests that determinate connection of representations is inadequate, and it still lacks something else. However, Kant's formulation of the argument requires further clarification. Perhaps the most striking feature of the argument for affinity is the repeated and complex modal expression. (AC4.2) and (AC4.3) are Kant's two formulations of *reductio* claims with the explicit reference to modal terms:

if this unity of association did not also have an objective ground [...] it would also be entirely *contingent* whether appearances fit into a connection of human cognitions. (A121)

For even though we had the faculty for associating perceptions, it would still remain in itself entirely *undetermined* and *contingent* whether they were also associable[.] (A121-122)

²⁰³ Kant's line of argument in the Argument for Affinity is not as clear as the previous four. Therefore, I have to discard some texts in favor of other ones. This claim is rewritten on the basis of the following text: "it would be impossible for appearances to be apprehended by the imagination otherwise than under the condition of a possible synthetic unity of this apprehension" (A121).

The second *reductio* claim is loaded with two modal expressions: (a) “associable” and (b) “undetermined and contingent”. Unfortunately, both of them are problematic. I would like first to dispel some terminological obscurity and inconsistency in this argument in order for the reader to have a better sense of Kant’s point in this argument. The expression “associable” in “whether they [the perceptions] were associable” is liable to invite misunderstanding. Normally, “associable” simply means being *able to* be associated, thus it indicates the *possibility* of association. In this case, being associated entails being associable; that is, the actuality of association entails its possibility. If this is right, Kant could trivially infer the possibility of association from the actuality of association that has already been proved in association argument. Then, it is curious why Kant says that whether the perceptions are associable is not determined.

On my view, this normal reading is incorrect. By “whether they were also associable” what Kant precisely asks is not *whether* association is *possible*, but whether the association is *necessary*, or equivalently, he is asking *how* association is *possible*. As a common practice, Kant’s how-possible question of x is a question of the ground of x . Kant is pursuing what the *ground* of their being associated is.²⁰⁴ In fact, this strong reading also coheres well with other text where Kant raises the question about association. In A144 Kant has a more precise articulation of the question: “on what, I ask, does this, as a law of nature, rest, and *how is this association even possible?*” (A144)

Therefore, I propose that we should abandon the normal and weak reading in favor of an unusual and strong reading of “associable”. In other words, it is more plausible to read “associable” as the *necessity* of association, the one of stronger modal strength, instead of the mere possibility of association. Construed in this way, what concerns Kant is not a trivial inference from the actuality of association to its possibility, but a substantial one from the actuality of association to its necessity. Of course, this inference cannot go through by itself, and some additional premise must be introduced.²⁰⁵

Kant’s modal expression “undetermined and contingent” is not only obscure but also incoherent. Since “contingent” is a modal term, “undetermined” should be read as *modally undetermined*. Then, what does modal indeterminacy mean? On my proposal, if some proposition P is modally undetermined, then the modal status of P cannot be decided in view of the *evidence* one has. For instance, actuality is a typical kind of modality, but it is modally coarse-grained. It can be further determined whether it is necessarily or contingently so. The necessity and contingency are modally

²⁰⁴ The necessity in question of the hypothetical necessity, rather than absolute necessity. According to Kant, if x is a ground of possibility of y , then y is hypothetically necessary. In fact, almost all necessities in Kant are hypothetical except those related to God.

²⁰⁵ Apparently, Kant is inquiring into the mode in which representations enter connections.

finer-grained. The modal determinacy is deeply relative. Relative to actuality, necessity is modally determinate. Relative to some other more fine-grained modality, say, the necessity of necessity, necessity is modally indeterminate.

It is strange that Kant should use the contingency in juxtaposition with modal indeterminacy. In Kant's formulation that "undetermined and contingent", the notion of modal indeterminacy and the notion of contingency are obviously *not coextensive*. It can entice two quite different readings on the precise modal nature of the question. Furthermore, "undetermined and contingent" are even *not compatible*. If a truth T is contingent, it follows that it is modally determined relative to actuality, rather than modally undetermined. The modal status of contingency excludes the possibility of necessity and it is modally determined. To claim that T is undetermined and contingent amounts to claiming that T is both modally undetermined and determined, which is obviously self-contradictory.

In the confrontation with the incompatibility between contingency and modal indeterminacy, we must decide which modal status Kant has in mind. Note that the first *reductio* claim "it would also be entirely *contingent* whether appearances fit into a connection of human cognitions". It is tempted to draw the conclusion that the modal status of second *reductio* claim in question is contingent, rather than modally indeterminate, by being consistent with Kant's first modal formulation. However, one cannot make such inference. The reason lies in that while both *reductio* claims are conditional, their antecedents are different. In Kant's first *reductio* claim, the antecedent of the conditional is that there is association *and* there is no objective ground. In Kant's second *reductio* claim, however, the antecedent of the conditional is that there is association without negating the objective ground. One uniqueness claim is included in the antecedent of the first *reductio* claim which is excluded from the second. Consequently, the different antecedents of the conditional in two conditional *reductio* claims correspondingly require the different modal restriction in consequents.

Suppose that P represents that there exists a subjective ground of reproduction in accordance with a rule, Q represents that there exists an objective ground reproduction in accordance with a rule, and R represents that representations are associated. The conditional in the first *reductio* formulation goes as follows:

(MC1) if $P \ \&\& \ not \ Q$, then R is *contingent*.

In contrast, the conditional of the second *reductio* goes in a different way:

(MC2) if P, then R is *modally undetermined*.

According to my reading, what Kant has in mind by the second *reductio* is modal indeterminacy, rather than contingency. The contingency reading is incorrect precisely because from neither (MC1) nor (MC2) does it follow:

(MC2*) if P, then R is *contingent*.

What Kant is pursuing is that, even if association is granted, it still remains *modally undetermined whether this association is necessary*. Kant's assumption is that if the reproduction with rules has an objective ground, then it is necessary that representations are associated. Therefore,

(MC3) if P & Q, then R is *necessary*.

On the other hand, the *reductio* claim further suggests that if the antecedent is satisfied, appearances will enter cognition in a necessary way:

(MC3) If P & Q, then R is *necessary*.

(Premise*) P & Q.

(Conclusion) R is *necessary*.

Therefore, the modal status of association is *condition-relative*; and the modal status of association is different with respect to the different antecedent. This conclusion is critically important, for it enables us to be in a position to clarify the modal status of association. In the argument for affinity, Kant's positive view is that *association is necessary* since it is grounded in affinity.

In some other place, however, Kant charges that *association is contingent*. Kant's contingency charge of association is not surprising. In fact, this is one of most standard criticisms Kant levels to the role of association in cognition in general. One typical statement on association is contained in §18 in B-Deduction:

Whether I can become empirically conscious of the manifold as simultaneous or successive depends on the circumstances, or empirical conditions. Hence the *empirical unity of consciousness*, through association of the representations, itself concerns an appearance, and is entirely contingent. (B139-B140)

Therefore, Kant's commitment to the contingency of association in B-Deduction is inconsistent with Kant's commitment to the necessity of association in A-Deduction. One response is that Kant might change or improve his view in the 1787 *Critique*. I think that a developmental reading of the difference does not do justice to Kant. Rather, I believe that Kant's theory of mind is substantially consistent and that there is no genuine difference between A-Deduction and B-Deduction concerning the modal status of association.

In light of the several distinctions I have made above, the alleged inconsistency disappears. Kant's necessity claim on association in the affinity argument in the A-Deduction amounts to claiming (MC3) that if there are both a subjective and an objective ground, then association is *necessary*. Kant's contingency claim on association in B-Deduction in effect claims (MC1) that if there is no objective ground, association is contingent. If Kant's argument for affinity is successful, then association is *in fact* necessary. Consequently, Kant maintains that association by itself is not only contingent but also unactual. In other words, the contingency of association is merely a hypothetical scenario. What Kant claims in §18 is that if association *were not* to make reference to the unity of transcendental self-consciousness, then association would be entirely contingent.

Another objection to the scope of association could be found in Guyer. In response to Kant's contrast between subjective unity and objective unity, Guyer powerfully argues as follows:

if we were to accept Kant's present move without qualification, we would have a dilemma on our hands: either some of our experience is merely subjective, and does not involve the categories, which means that the categories do not after all have objective validity, that is, apply to all our experience; or else all of our apperception is objective and the categories do apply to all our experience, but only because we do not have any merely subjective experience at all. Neither horn of this dilemma seems attractive. (2006, 90-91)

Guyer is acutely aware of the fact that the putative contingency of association implies that some objects of sensible intuition are merely associated without being subject to categories, which is inconsistent with Kant's alleged conclusion that all the objects of sensible intuitions are subject to categories. Guyer's objection is quite reasonable. As far as Kant's intention is concerned, I believe that Kant is caught on the second horn of the dilemma, namely, categories apply to all of our experience.²⁰⁶ As I have explained above, Kant's contention that association by itself is contingent is a theoretical conditional truth that is never actualized in our world. For Kant, there is no contingent association in the world just as there is no colorless shape in the world.

6.6.2 Kant's Dual Necessity

Remember that in the association argument Kant has shown that association *necessitates* representations. The necessity of association appears to render superfluous the association argument that representations are necessarily connected. The key to explaining away the superfluosity is to shed light on the difference between the modal characterizations in the two sub-arguments, which could be formulated in this way: the association argument is intended to establish that every representation is *necessarily connected* with another. The affinity argument, by contrast, is intended to establish that every representation *necessarily instantiates* the connection with another. Kant attempts to contend that the necessary connection is necessarily instantiated. Broadly speaking, the necessity in the two arguments are operative on different levels. The first kind of necessary relationship holds between objects, i.e., between appearances, while the second kind of necessary relationship holds between object and subject, i.e., between appearances and understanding. The conflation of one with the other will distort the entire picture of the Transcendental Deduction.

In fact, this characteristic modal structure is not peculiar to the argument for affinity; rather, it is formulated in different guises in different texts. Corresponding to the two different notions of necessity, two kinds of texts should be carefully distinguished. On the one hand, Kant talks about the necessary connection between appearances:

All appearances therefore stand in a thoroughgoing connection according to *necessary laws*[.] (A113-114)²⁰⁷

²⁰⁶ It does not mean that categories are valid of literally everything in space and time without qualification. As Kant adds in 1787 *Critique*, categories are only valid of objects of outer intuition.

²⁰⁷ For Kant, the necessary connection is equivalent to the lawlike (*gesetzlich*) connection.

I will not mention that, e.g., *the concept of a cause brings the trait of necessity* with it, which no experience at all can yield, for experience teaches us that one appearance customarily follows another, but not that it *must necessarily* follow that, nor that an inference from a condition to its consequence can be made *a priori* and entirely universally. (A112)

Since perception is the empirical consciousness of appearances, the metaphysically neutral language of appearances could be formulated by the representational talk of perceptions.²⁰⁸ As Kant writes:

There is only one experience, in which all perceptions are represented as in thoroughgoing and *lawlike* connection[.] (A110)

On the other hand, Kant talks about the necessary instantiation of the connection, which is reflected by “the *necessary* connection of the understanding with the appearances” (A119):

Now since this relation of appearances to possible experience is likewise *necessary* (since without it we could not obtain any cognition at all through them, and they would thus not concern us at all), it follows that the pure understanding, by means of the categories, is a formal and synthetic principle of all experiences, and that appearances have a ***necessary relation to the understanding***. (A119)

Given that appearances are given to sensibility and apperception is sometimes identified with understanding, sometimes Kant would say that the necessary relation holds between sensibility and apperception:

However, the possibility, indeed even the necessity of these categories rests on the relation that the entire sensibility, and with it also all possible appearances, have to the original apperception, in which everything is *necessarily* in agreement with the conditions of the thoroughgoing unity of self-consciousness, i.e., *must* stand under universal functions of synthesis, namely of the synthesis in accordance with concepts, as that in which alone apperception can demonstrate *a priori* its thoroughgoing and necessary identity. (A111-A112)

²⁰⁸ I take Kant’s notion of appearances to metaphysically neutral because appearances are neither things in themselves nor representations unless appearances are interpreted by realism or idealism.

In another place, Kant simply reduces the necessary relationship between appearances and apperception into that between two faculties, namely, of sensibility and understanding:

By its means we bring into combination the manifold of intuition on the one side and the condition of the necessary unity of apperception on the other. Both extremes, namely sensibility and understanding, must *necessarily* be connected by means of this transcendental function of the imagination[.] (A124)²⁰⁹

This *dual necessity* is characteristic of Kant's transcendental path. Kant's systematic and consistent distinction between the two kinds of necessity makes it difficult to believe that Kant conflates the *de dicto* necessity with the *de re* necessity. According to one misleading interpretation, Kant has a short argument from (N1) to (N2) and therefore he is committed to the view that the necessary connection entails the necessary instantiation:

(N1) Objects are necessarily connected. (Anti-skeptical particularism)

(N1*) Objects necessarily instantiate the connection.

Of course, it is logically fallacious. But if the argument is understood not as deductive but as abductive, then it is a convincing argument: (N1*) is obviously the sufficient condition for (N1). There is a deeper point. Kant could complement the explanatory argument with one additional argument for the *necessity* of necessary instantiation, where the necessity is one of the consequence. Then the argument becomes valid:

(N1) Objects are necessarily connected. (Anti-skeptical particularism)

(N2) The necessary connection is made possible by the necessary instantiation of the connection.

(N3) The necessary connection is not made possible in any other way.

²⁰⁹ The difference is best evidenced in the necessary relation of appearances to experience. To say appearances must be necessarily connected into the experience is not to say that appearances must be necessarily connected with each other.

(N4) The necessary connection implies the necessary instantiation of connection.

(N1*) Objects necessarily instantiate the connection.

The necessary instantiation is equivalent to the grounding model that “the representation makes the object possible”. As we have shown in previous chapters, the necessary connection is not made possible by all other rival grounding models. Therefore, Kant draws the conclusion with twofold necessity: one is the necessity of the consequence, which is derived from the disjunctive syllogism, and the other is the necessity of the consequent, which is derived from the inner structure of the grounding model. This broad argument is the very core of the Copernican Revolution. I think that it suffices to make the argument from cognition a convincing and *independent* argument. However, Kant’s actual argument from cognition runs in a different direction by appealing to the identity of self-consciousness.

6.6.3 The Strength of the Premise

In the previous sub-arguments, from the rich conception of cognition flow the various dischargers of *reductio* assumptions. One might propose that this strategy of *conceptual* analysis is also true of the argument for affinity. To recall Kant’s various conceptions of cognition: in the *Stufenleiter*, cognition is the conscious representation of an object; in the second section of A-Deduction, cognition is “a whole of compared and connected representations” (A97). It is not difficult to see that while composition and connection are implied by this definition, no claim to *the necessity of combination* is explicitly contained in these definitions of cognition. Therefore, it is not clear why appearances cannot “fit into a *connection* of human cognitions in a *contingent* way” (A121).

Even if Kant were committed to a conception of cognition involving such an implicit modal constraint, this conception of cognition would be too strong to be intuitive. The modal requirement seems to be motivated by an *ad hoc* prescription of the notion of cognition. In fact, in the affinity argument it is the second time when “human cognition” makes an explicit appearance in the argument from cognition. Ironically, in this very occasion Kant makes a demand that the cognition by itself cannot afford.

On another proposal, Kant’s target is directed against the empirical adequacy of the association model of mind, namely, *the scope of association*. In effect, this proposal makes a *reductive* analysis of the necessity in question without taking the modal characterization at face value. This proposal has the additional bonus to avoid the problem that Kant’s modal characterization in the

argument for affinity seems excessively strong. As far as one representation is associated with another, the connection is necessary. It does not mean, however, that *all* representations must enter the connection necessarily and be associated with other representation determinately. It is likely that *at least some* representations could escape from the association.

The reason why the association model of mind is inadequate lies in that not *all* representations are associated into necessary connection, there must be further ground such that all representations are associated into necessary connection. What the previous association argument establishes only applies to some representations where there exists relevant habit for a certain kind of representation. If so, Kant's point in the affinity argument is that there must be something else that makes *all* representations associated into determinate connections.

One might further ask why association cannot guarantee that all representations are necessarily connected. The answer is that the explanatory inadequacy of association is deeply rooted in the empirical nature of association. Consider the following two reasons for this view. I will call them respectively as the reason of the *gap in time* and the reason of the *gap for erring*.

In order for association to take its effect, we should acquire a relevant habit or custom as the mechanism to associate a particular kind of event. The formation of the mechanism of habit or custom relies on repeated observation, and this in turn requires a certain amount of time. Suppose that one forms the relevant and required habit or custom for the association of a particular kind of event *E* at the time *t*. Before *t*, however, it leaves a time gap with regard to lawfulness, and therefore there is no association to determinately connect one representation with another. Obviously, this time-gap objection could be mounted against any particular type of event.

Or we can understand the limitation of the association in a different light. Given a particular type of event *E*, association constantly connects one representation that falls under *E* with another representation *F*. However, it cannot be guaranteed that the mechanism of habit or custom can always do so. It might be the case that our mind does not always associate one representation that falls under *E* determinately to another representation. It is likely to happen because our habit or custom of association is *empirically acquired in the short run and historically evolved in the long run*. The relevant mechanism of habit or custom *can err*. The mechanism of association as adapter often works such that it suffices to enhance the chance of our survival, but it does not do this job with metaphysical necessity.

In spite of their plausibility, I think that the above criticisms against the empirical inadequacy of association model of mind are not Kant's point. In what follows I will explain why we cannot

and should not attribute this reading to Kant. For one thing, Kant *does not* hold this view. For Kant there is no problem in the scope of association. As Kant himself makes explicitly, “laws of a thoroughgoing connection in reproduction” are “*universal*” (A122). For another, Kant *should not* hold this view. For the sake of argument, it is not an interesting strategy for Kant to argue against *the empirical limitation of association model of mind*, even if there is indeed some deficiency in the association model of mind. In order to sharpen his argument, Kant should instead argue against *the association model of mind in its strongest form*, for which the rule of association unexceptionally applies to every representation, and therefore the association of mind is empirically adequate for explaining the necessary connection in the world.

For the polemical reason the philosophical significance of empirical adequacy is particularly important. If the model of association were not to perform the function to live up to the standard of empirical adequacy, empiricism would be left with room to rejoinder to the Kant’s argument. Empiricists could claim either that association model of mind is misunderstood, or that its potential is not exhausted. In either case, Kant does not do justice to association model of mind. For instance, empiricists can reply that as far as has been observed to date, the association is quite good to explain a variety of phenomena. It is very plausible to postulate the empirical adequacy of association as a contingent truth.

Now that Kant has neither conceptual nor empirical reason to introduce a new dimension of necessary instantiation, one might wonder on what ground Kant is justified in arguing that the world is necessarily connected in virtue of necessary instantiation. It seems that the dual necessity seems not only excessively but also *unnecessarily* strong. The empiricists are justified to ask: since the association model is empirically adequate, why don’t we satisfy with the contingency of the claim? Or more generally, why should the modal status be relevant to our concern? A more radical charge is that why we should make the claim to necessity, namely, to an objective ground at all. What the affinity argument intends to say is that not only all representations are necessarily connected, but also they necessarily instantiate the connection.

Kant’s answer is that even if the association model of mind is empirically adequate, it is *not* consistent with *our modal truth*. Consequently, it is incompatible with the modal structure of reality. This is Kant’s moment in philosophy. Kant changes his premise from the definition of cognition to some modal truth. As Kant makes clear that it is *the modal truth concerning self-consciousness*, rather than *the modal truth concerning mathematics or physics*, that plays the role of the touchstone for examining a model of human mind. Kant makes this move out of the consideration of the consistency of his system, or better, his body of fundamental philosophical convictions. This constitutes a reply to

the objection that Kant's position of necessary instantiation of necessary connection is excessively strong.

6.6.4 The Argument Reformulated

In the following, I would like to propose that the affinity argument is concerned with the modality of the connection between representations. More specifically, I will argue that the affinity argument intends to *determine the modal status* of some claim with reference to some modal truth and to explicate what the precise modal formulations are.

Now the argument for affinity considered above can be reconstructed as a characteristic Kantian Disjunctive Syllogism:

(AC4.1*) That representations instantiate the determinate connection is either contingent or necessary. (Logical Truth: the modal indeterminacy of Connection Thesis)

(AC4.2*) The contingency of the instantiation of determinate connection of representations is *inconsistent with* the necessity of the ascription of all my representations to self-consciousness.

(AC4.3*) The ascription of all my representations to self-consciousness is true. (Self-Ascription Thesis)

(AC4.4*) The contingency of the instantiation of the determinate connection of representations is false.

(AC4.5*) That representations instantiate the determinate connection is necessary.

The reconstructed argument (AB4*) precisely instantiates the scheme of *Kantian Disjunctive Syllogism*. The minor premise of the syllogism is a negation of a disjunct, which is determined by its incompatibility with some modal truth by *modus tollens*:

(AB4.1*) Either P is contingent or P is necessary. (Major Premise)

(AB4.2*) Q is necessary. (Modal truth)

(AB4.3*) The contingency of P is *inconsistent with* the necessity of Q. (Inconsistency)

(AB4.4*) P is not contingent. (Minor Premise)

(AB4.5*) P is necessary. (Conclusion)

As the scheme shows, the overall argument is obviously valid. The following task is only to examine its premises to see whether it is sound. Like other Kantian disjunctive syllogisms, whether the argument stands or falls depends on the truth-values of the major premise (AB4.1*) and the minor premise (AB4.4*) of the disjunctive syllogism. Since (AB4.1*) is taken as a theoretical truth on certain assumptions, the soundness of the argument draws on (AC4.4*), the negation of one disjunct. The truth of the minor premise in turn draws on the Inconsistency Premise (AC4.2*) and the Modal Truth Premise (AC4.3*). In this chapter I will assume the truth of Self-Ascription Thesis (AC4.3*) and leave Kant's argument for it aside to the next chapter. Therefore, I will only concentrate on examining whether the Inconsistency Premise (AC4.2*) holds, and what additional premise is required in order for this argument to go through, provided that it does not hold.

In (AC4.2*) the contingency of the Necessary Connection Thesis is refuted if any of its logical consequences contradicts the Self-Ascription Thesis. Let's look at what the contingency of Necessary Connection Thesis implies. Kant writes:

in case they were not [*associable*], a multitude of perceptions and an entire sensibility would be *possible* in which much empirical consciousness would be encountered in my mind, but separated, and without belonging to one consciousness of myself, which, however, is impossible. (A122)

As has been explicated before, “associable” means the necessity of association. To claim that perceptions were not associable is equivalent to claim that the association of perceptions does not have objective ground and thus it is not hypothetically necessary. The consequence of this counterfactual scenario is that it is *possible* that “much empirical consciousness” would not belong to one self-consciousness. Note that Kant does not make the claim that it is *actual* that “much empirical consciousness” would not belong to one self-consciousness. This confirms my view that Kant does not argue against the empirical adequacy of association.

Obviously, it is unproblematic that the consequence of multiple selves is immediately incompatible with the identity of self-consciousness, which I have assumed without offering any proof. Now the question is whether and how this consequence *is* implied by the contingency of the Necessary Connection Thesis in the counterfactual scenario of the contingent association.

Given that Kant does not make explicit what the connection between the contingency of association and the negation of Self-Ascription Premise is, in the following I will try to reconstruct one possible line of Kant's thought:

(1) It is contingent/groundless that all perceptions are associated into necessary connections.

By negating (1), we have the claim that

(2) It is possible that not all perceptions are associated into necessary connections.

From (2) the consequence Kant intends to draw is:

(3) It is possible that not all perceptions are ascribed to one self-consciousness.

In order for the inference from (2) to (3) to go through, Kant is committed to the assumption that

(A*) For any representation x , if x is ascribable to one self-consciousness, then it is associable into connection.

According to the association model of mind, all perceptions stand in determinate connection, though whether perceptions enter into the connection is contingent and depends on the circumstances. In Kant's words, the association does produce "unity" among perceptions. While Kant does not say it explicitly, the unity of association is obviously synthetic. It is noteworthy the unity of self-consciousness plays no part in the association account of necessary connection.

The friends of the association model of mind can argue that this subjective unity by association is all that we have, and by means of the subjective unity all our perceptions *are not* separated. Then, they can further ask, very justified, why we need a redundant unity of self-

consciousness at all, and, even if we do have, why the connection by association should have bearing upon the ascription of empirical consciousness to one single self-consciousness.

Even if this line of reasoning is accepted as well-motivated, the friends of association model of mind still have other ways to escape from it. For instance, they can acknowledge that we have a thin conception of the identity of self-consciousness, namely in the sense of logical identity of self-consciousness, and meanwhile they equally claim that the connection of empirical consciousness needs not to refer to self-consciousness. Therefore, the self-consciousness has nothing to do with the connection between empirical consciousness at all.

The friends of the association model of mind believe that the burden of proof is loaded on Kant's side. The unity of self-consciousness is at best one *sufficient* condition, but not a *necessary* condition for connection between different empirical consciousness. What is at issue is not to show that why association is not *sufficient*, but to show why self-consciousness is *necessary*.

Unfortunately, this is the weak point in Kant's formulation of the argument from cognition. Yet, it does not damage the substance of Kant's line of thought. Kant's basic idea is as follows: if there is no ground of association, then there is no affinity; if there is affinity, there is no *a priori* synthetic unity; if there is no synthetic unity of the manifold, then there is no identity of self-consciousness; if there is no identity of self-consciousness, there is dispersed empirical consciousness. In order for the argument to go through, Kant must commit himself to the view of "no identity without affinity", which lacks adequate justification here.

In any event, however, this is not an incurable deficiency in Transcendental Deduction. As has been indicated, the different versions of arguments have different strength and weakness. This relation between association and identity of self-consciousness will be remedied by Kant's introduction of the analytic unity and the synthetic unity of the self-consciousness in his argument from self-consciousness in Chapter 7.

6.7 Metaphysical Grounding: Affinity, Imagination and Categories

6.7.1 The Imagination as Ground

The association argument claims that representations have a subjective and empirical ground, and it proceeds to identify the subjective ground as association. Likewise, in the affinity argument claims that representations must have an objective ground, and it further suggests that the "objective ground of *all* association of appearances" (A122) is affinity. Then, what is affinity? In *Critique*, Kant defines affinity as follows: "[t]he ground of the possibility of the association of the

manifold, insofar as it lies in the object is called the **affinity** of the manifold” (A113). In the *Anthropology* Kant’s definition is slightly different from the above one: “[b]y *affinity* I understand the unification (Vereinigung) of the manifold in virtue of its derivation from one ground.” (AA 7:176-177)

The definition in the *Anthropology* contains two key pieces of information. First, affinity is a “unification of the manifold”. Although Kant does not say it explicitly, affinity should be understood as *synthetic unity*. As I have indicated, Kant takes apprehension and association to have synthetic unity. In the argument from above Kant also identifies “**the transcendental principle of the unity** of all the manifold of our representations (thus also in intuition)” as “synthetic” (A116). Therefore, I think that it is reasonable to suggest that the unity of affinity is also a kind of synthetic unity. If Kant has synthetic unity at his disposal, it seems natural for him to infer to the synthesis and categories. The definition enables such an immediate inference by including the metaphysical notion of *grounding* in it. Furthermore, affinity does not only mean the synthetic unity of manifold, but indicates that the synthetic unity is not *sui generis* and that it is grounded as a consequence. In other words, it is hypothetically necessary that the manifold representation is such connected. By combining the two remarks, we can conclude that affinity is defined in terms of the *explanatory role* it plays. On the one hand, affinity is introduced as the objective *ground* of association, and the latter is grounded by the former. On the other hand, affinity as *consequence* is in turn grounded on the *a priori* synthesis of imagination, as Kant writes that “the affinity of all appearances (near or remote) is a necessary consequence of a synthesis in the imagination that is grounded *a priori* on rules” (A123). Therefore, Kant’s picture of cognition is underwritten by the metaphysical relation of ground and consequence.

The metaphysical chain of grounding extends further than the affinity. Defining affinity in this way, Kant sheds new light on the nature of imagination as well as the role it plays in constituting objective representation. As mentioned before, the received view is that the faculty of the imagination “has been limited to reproduction” (A120f). In the apprehension argument Kant postulates that the faculty of the imagination must have the function of the synthesis of apprehension that plays a role in perception, and thus broadens the understanding of what imagination is. In the affinity argument Kant is doing exactly the same thing. In addition to the reproductive function, as Kant suggests, the imagination also has the productive function. The productive imagination is “a faculty of the original presentation of the object, which precedes experience” (AA 7:167).²¹⁰ It is noteworthy that Kant is not saying that the productive imagination

²¹⁰ For more detail see *Anthropology* §28 (AA 7:167-169).

must be *a priori*; rather, he is saying that the *a priori* synthesis of imagination must be productive. Therefore, Kant suggests that it is the productive imagination that is at play for the affinity of the manifold. For Kant, the imagination emerges also as a faculty of synthesis *a priori*. The *a priori* synthesis is the transcendental function of imagination that is essentially distinguished from other empirical functions such as apprehension and reproduction. The discovery or postulation of a transcendental dimension of mind is the most revolutionary and controversial part in Kant's theory of mind. In Chapter 5 I have discussed how Kant introduces and delineates the precise nature of the imagination, therefore I will spare myself another discussion on it here.²¹¹

6.7.2 Categories as Ground

After the introduction of the transcendental synthesis of the imagination, Kant makes the inference to categories. Again, he relies on the metaphysical relation of ground and consequence and extends it to categories, which are characterized as the grounds of the unity of synthesis: “[on those categories] is grounded, therefore, all formal unity in the synthesis of the imagination, and by means of the latter also all of its empirical use (in recognition, reproduction, association, and apprehension) down to the appearances, since the latter belong to our consciousness at all and hence to ourselves only by means of these elements of cognition.” (A125)

To be sure, Kant identifies categories as the *grounds of* “all formal unity in the synthesis of the imagination”. On my reading, nevertheless, what Kant intends to say is not that categories are numerically distinct from the formal unity of synthesis, but that they are identical with it.

Kant's introduction of categories is very brief, and it looks like an assertion, rather than an argument. Guyer complains that Kant's reasoning is too abstract.²¹² I think that Guyer's objection is quite fair. The ill-argued link between synthesis and categories does not only make trouble for the argument from cognition, but also plagues every version of Kant's argument. This difficulty can only be relieved, if not resolved, in Chapter 8, where a study of the meaning and origin of categories will shed light on the inference from synthesis to categories.

From the introduction of transcendental affinity, Kant identifies a series of metaphysical relation of consequence to ground: affinity is grounded in the transcendental synthesis of the imagination, and the transcendental synthesis of imagination is in turn grounded in categories. This

²¹¹ See 5.6.

²¹² For more details see Guyer 2006, 87-88.

chain of inference is clearer than any other place in lending support to my metaphysical interpretation of the nature of argument in Transcendental Deduction.

The argument from cognition is lengthy, and sometimes it seems even unnecessarily tedious. It is doubtful whether, for the sake of argument, it is necessary to take such a long journey to find the entrance of Deduction, namely, the synthetic unity, in the thick notion of affinity. In fact, this deficiency will be remedied by the one argument from the identity of self-consciousness. Relying on some other modal truth, Kant will soon find the entrance to the synthetic unity necessary for the success of Transcendental Deduction.

Chapter 7 The Argument from Self-Consciousness

7.1 Introduction

Kant's most celebrated argument in the Transcendental Deduction is the one centered on the notion of self-consciousness, or equivalently, transcendental apperception, or **I (think)**²¹³. This line of argument is referred to, or acclaimed as, the master argument in the Transcendental Deduction. To many people the argument from self-consciousness *is* the transcendental deduction of categories itself.²¹⁴

In fact, Kant wrote this line of argument twice. The first version is the so-called “argument from above” in the A-Deduction, which runs from A116 to A119. And the second version of the argument is located in §16 in the B-Deduction.²¹⁵ The ramifications of the argument from self-consciousness go beyond that: as we have seen in the last chapter, the notion of self-consciousness is indispensable even for Kant's official argument from cognition in A-Deduction. In addition, a detailed elaboration of the notion of self-consciousness is included in the threefold synthesis.²¹⁶

On my reading, the broad structure of the argument from self-consciousness could be constructed on the textual basis of the Transcendental Deduction in the 1781 *Critique* as follows:

(AS1) Necessarily, all my representations in an intuition contain the **I think**. In other words, all my representations stand in analytic unity. (Self-Ascription)

(AS2) Analytic unity implies synthetic unity. (Assumption)

(AS3) Necessarily, all my representations stand in synthetic unity. (from AS1 and AS2)

(AS4) The synthetic unity of representations in one intuition implies the transcendental synthesis.

(AS5) The transcendental synthesis of imagination implies categories.

(AS6) Necessarily, all my representations imply categories.

²¹³ I take apperception, self-consciousness, the **I (think)**, and the **I (am)** as synonymous and use them interchangeably. The self-consciousness is of German root, while the apperception is of Latin root. I do not think that Kant plays the trick of making use of the words of different roots to express different concepts; rather, it is a systematic feature in Kant's philosophy to use the terms of different roots to express the same concept.

²¹⁴ Just to name a few examples: Strawson 1966, Dickerson 2003, and Wunderlich 2011.

²¹⁵ Strictly speaking, the second version of argument is not complete, since it finally drives into a new direction. However, it is not difficult for us to add what is missing and to reconstruct the argument in its entirety on the basis of the A-Deduction. As we will see later, what matters to me happens to be the part in §16.

²¹⁶ See the section “On the synthesis of recognition in the concept” in the 1781 *Critique* (A103-110).

(AS7) Necessarily, categories are applied to appearances.²¹⁷

This argument from self-consciousness is composed of two parts: the steps from (AS1) to (AS3) are characteristic of the argument from self-consciousness, and constitute the entrance to the transcendental path, and the steps from (AS4) to (AS7) are the routine route of the transcendental path shared by all versions of deduction.

On the bottom level, my conviction is that the basic idea of the argument from self-consciousness is quite simple. Kant need not bother himself to make the relevant discussion unnecessarily lengthy. Once the basic idea is figured out and articulated, the argument from self-consciousness will suddenly come to light. It turns out that the argument from self-consciousness constitutes the most straightforward and quickest argument in the Transcendental Deduction.

There are many reasons for the fact that the commentators overlook such a possibility of simplistic reading. Perhaps the most important reason is that Kant does not make his line of reasoning explicit in every twist and turn. Moreover, Kant's argument is complicated by his ambiguous terminology. It is not to say that Kant is playing the trick of ambiguity, but that Kant himself is not always clear. For instance, Kant is trading on the ambiguity of analytic unity and synthetic unity as well as the ambiguity of result and act. Finally, even Kant's formulation is sometimes inaccurate. For instance, Kant misleadingly claims that analytic unity *presupposes* synthetic unity.

In this chapter I will concentrate on the argumentative part for the synthetic unity from self-consciousness that runs from (AS1) to (AS3), and spare the effort of giving another redundant analysis of the second part of the argument from (AS4) to (AS7), since the metaphysical background has been discussed in the transcendental path in Chapter 5, and the most powerful defense of this common part is made in the argument from cognition in Chapter 6. All of the important steps from (AS1) to (AS3) are contained in the short and dense §16.

In section 7.2, I will argue that even the argument from self-consciousness is not primarily anti-skeptical. The way of reading it as one argument against the Humean skepticism on the basis of the Cartesian evidence is unfounded. I hold that it is the fact concerning self-consciousness, rather than self-consciousness itself that is to be explained, which is consistent with Kant's claim that self-consciousness is considered the supreme faculty. The fact of the ascription of all my

²¹⁷ On a phenomenalist reading of Kant's idealism, appearances are representations.

representations to an identical self does not enjoy any epistemic privilege to other facts that Kant takes for granted.

In section 7.3 I will center my discussion on (AS1), namely, Kant's idea of self-ascription and its various facets. To interpret Kant's self-ascription thesis, I would like to take the approach of semantic analysis by invoking Kant's own theoretical resources of marks and containment. The key to interpreting the self-ascription thesis in a semantic way is to focus not on the *activity* or some other aspects, but on the *content* of self-consciousness, which is linguistically designated by the "**I think**".²¹⁸ Therefore, I read the "**I think**" as a *mark*, and I argue later that it is an *intuitive mark*, rather than a discursive mark.²¹⁹ On this mark reading, I argue that the self-ascription thesis is essentially analytic. The self-ascription thesis (AS1) is claiming that (AS1*) the "**I think**" as a *mark* that is semantically contained in every "**my representation**" as a *whole-representation*. More specifically, the self-ascription thesis states that (1) my representation is mine for it's being accompanied by *self-consciousness*, that (2) representations are ascribed to one *identical* self, (3) that the self-ascription thesis is an *a priori analytic truth* in virtue of the containment of marks and theoretical assumptions, (4) that it lays claim to the possible self-consciousness rather than to the actual self-consciousness, and (5) that it is local thesis rather than a global thesis.

In section 7.5 and section 7.6, I will center my discussion on (AS2) and (AS3), namely, Kant's idea of unity and its relation to manifoldness or multiplicity. One distinctive feature of the B-Deduction is that Kant introduces the conceptual distinction between analytic unity and synthetic unity in the hope of clarifying the obscurity of linking identity with the connection in the A-Deduction. I believe that previous interpretations fail to exploit the conceptual resources Kant offers largely due to the fact they overlook the systematic ambiguities in both notions. I will carefully differentiate the various senses of them, and examine different arguments based on them. In line with my previous mark reading, I propose that it is most promising to read the analytic unity and the synthetic unity of self-consciousness as co-extensive. In this light, Kant's inference from the analytic unity to the synthetic unity of self-consciousness is conceived as addressing the question as to how the intuitive mark of **I** is brought into every manifold of my intuition.

7.2 The Self-Consciousness and Anti-skepticism

²¹⁸ For a survey of the different questions and answers in interpreting the "**I think**" see Klass 2003.

²¹⁹ Longuenesse holds that "the proposition 'I think' is thus characteristic of a merely discursive, not an intuitive understanding" (1998, 68). On my reading, the **I think** as an intuitive mark is neither discursive nor propositional.

As a common practice, the interpretation of Kant's Transcendental Deduction is often preceded by a detailed study of self-consciousness. The analysis of Kant's notion of self-consciousness is so preeminent that it as it were reduces transcendental deduction to a study of self-consciousness. Since the nature of Kant's self-consciousness itself requires book-length study,²²⁰ and my present concern is merely the argumentative role of some *aspects* of self-consciousness in Transcendental Deduction, I will spare myself from the daunting task of offering a systematic study of what self-consciousness is, and concentrate on Kant's own *definition*, rather than the various specifications.

While Kant's discussion of self-consciousness is abundant, his most explicit and rigid definition seems to only make an appearance in his famous Refutation of Idealism. Kant writes that "[t]he consciousness of myself in the representation **I** is no intuition at all, but a merely **intellectual** representation of the self-activity of a thinking subject." (B278)²²¹ Kant believes that his own distinctive conception of self-consciousness encapsulates a genuine insight and contains a criticism of a mistaken view embraced by his predecessors, contemporaries and his uncritical past. Kant insists that the pure or transcendental self-consciousness is the consciousness of the *activity* of understanding, and that it should be distinguished from empirical self-consciousness as *inner sense*.²²²

The fact that self-consciousness is appealing to philosophers and commentators is understandable. One important exegetical reason is that the notion of self-consciousness serves as the very point of departure of the entire argument in the B-Deduction as well as in the so-called argument from above in the A-Deduction. Therefore, it is very natural to view the notion of self-consciousness as the cornerstone of the entire project of transcendental deduction, and to suppose that the prospect of the entire argument depends on it.

However, I believe that the absolutely central status of self-consciousness in Transcendental Deduction is overrated. As it has been indicated, I adopt a generous and loose reading of the lines of arguments in the Transcendental Deduction, and I find that there exist other lines of argument independently from the argument from the identity of self-consciousness. Therefore, self-consciousness is not necessary for Transcendental Deduction. Even if we cling strictly to Kant's

²²⁰ See Ameriks 2000, Rosefeldt 2000, and Tester 2014.

²²¹ See §7 of the *Anthropology* for a similar definition of self-consciousness: "the higher, of spontaneity of apperception, that is, of pure consciousness of the activity that constitutes thinking". (AA 7:141)

²²² In §24 of the *Anthropology*, Kant makes contrast between two kinds of self-consciousness as follows: "Inner sense is not pure apperception, a consciousness of what the human being *does*, since this belongs to the faculty of thinking. Rather, it is a consciousness of what he *undergoes*, in so far as he is affected by the play of his own thoughts." (AA 7:161)

own presentation, the appeal to self-consciousness is by no means indispensable. The role of self-consciousness is entirely absent in Kant's argument in *Prolegomena* in 1783 and his suggestion in *Metaphysical Foundation* in 1786, and it also does not find itself in his famous Analogies, either.

The conception of self-consciousness is of great theoretical potential.²²³ Indeed, according to the traditional interpretation, the argument from self-consciousness starts with a self-evident Cartesian premise concerning the **I think** to derive a deeply anti-Humean result. To be sure, Cartesian and Humean skepticisms are of entirely different concerns. It nonetheless seems promising to read Transcendental Deduction as refuting Humean skepticism with the Cartesian inspiration. For the defenders of such an interpretation, the fact that Kant does not reiterate Descartes' *cogito* argument is not a vice, but a virtue: Kant not only should but also does contribute something *original* in his version of the argument from self-consciousness.

Kant's notion of self-consciousness roots itself deeply in the early modern Cartesian tradition. For Descartes, the *cogito* is the Archimedean point in his foundationalist project of epistemology. The certainty of the proposition "**I think**" is the first piece of knowledge evident and beyond doubt, from which other knowledge could be deduced when combined with certain principles. Moreover, the certainty of the knowledge of the existence of mind is also immune from even the most radical kind of skepticism.²²⁴

Kant's notion of self-consciousness is linguistically designated by "**I think**", which is reminiscent of Descartes' famous *cogito* argument that "I think therefore I am". Since Kant's notion of self-consciousness also serves as the very point of departure of the argument, one might quite reasonably suppose that self-consciousness is the Archimedean point in Kant's system of philosophy. It is expectable that the connection of Kant with Descartes is profitable. For instance, Henrich dubs the term "Cartesian evidence" to refer to our certainty of the identity of ourselves.²²⁵

In addition, the anti-skeptic prospect of the argument makes the notion of self-consciousness exciting. The anti-skepticism reading of the nature and task of the Transcendental Deduction is prevalent. Compared to the argument from cognition, it is much more plausible to have an anti-skeptical reading of the argument from self-consciousness. The possession of the cognition as the

²²³ Commentators vary on the evaluation of the place of Kant's theory of self-consciousness in the history of philosophy. Henrich and many others are convinced that Kant's conception of self-consciousness is revolutionary. See Henrich 1989b. By contrast, recently Wunderlich attaches critical importance to the continuity of Kant's account of self-consciousness with his rationalist predecessors' theories of self-consciousness in Germany. For German idealist such as Fichte the self-consciousness is self-positing. See Wunderlich 2005. For a useful survey of the history of self-consciousness in early modern philosophy see Thiel 2001.

²²⁴ For an excellent reconstruction of Cartesian foundationalist epistemology see Bonjour 2009, 9-23.

²²⁵ See Henrich 1989b and Henrich 1994. For a study of Descartes and Kant see Longuenesse 2017.

synthetic unity of representations seems too strong to win the favor of the opponents. The identity of self-consciousness, by contrast, seems to be a much thinner and much more defensible premise. Hence, the argument from self-consciousness gives precisely what the commentators want.

In spite of its initial plausibility, I think that this line of interpretation is misleading. First of all, the premise of Kant's argument from self-consciousness is not Cartesian. One important reason for it's not being Cartesian lies not in that the Cartesian notion of self is a substance (activity), but in that both the key facts of *self-ascription* and *personal identity* are completely absent in Descartes' *cogito* argument. Descartes does discuss the relationship between consciousness and representation in other places, but he never argues explicitly that the self-ascription is defined in terms of being conscious, nor does he give any analysis of the semantic relation of 'my representation' to 'the I', not to mention incorporates this idea in his *cogito* argument.

While Descartes also discusses personal identity, the derivability of personal identity makes it entirely irrelevant to the *cogito* argument. The personal identity is not only metaphysically derivative of the substantiality of the mind, but it is also epistemologically derivative: the mind is known in the first place, and known to be substance, and then it is inferred that it is also identical in virtue of its substantiality. Although Kant's notion of the identity of self-consciousness is metaphysically grounded in the synthesis of transcendental imagination, it is epistemologically known in the first place: we analytically know that the identity is contained as a mark in the representation **I think** with regard to the manifold representations.²²⁶

Essentially, Kant's argument is not *justificatory*, but *explanatory*, in character. After the introduction of the identity of self-consciousness, Kant steers his argument into his own direction. What Kant does is not to establish some general *epistemic criterion* to justify other pieces of beliefs, neither does he deduce the *logical consequences* from it. Rather, Kant is engaged with how to explain the *metaphysical ground* of the modal truth concerning the identity or the analytic unity of self-consciousness.

The identity of self-consciousness seems not to enjoy any epistemic privilege. For Descartes, the ascending from mind to God is almost the only path available to him.²²⁷ For Kant, by contrast, the identity of self-consciousness is merely one member of a set of acknowledged modal facts Kant takes to be well-established and acceptable for a sensible mind. These facts include sciences (mathematics and physics), the laws of nature, the freedom of will, etc. Kant could argue from any of the premises concerning these facts. Therefore, the notion of self-consciousness is *merely one*

²²⁶ Rosefeldt 2000 emphasizes the logical import of the minor premises of the rationalist paralogisms.

²²⁷ For an account for the ascending from mind to God see Menn 2002.

entrance to the transcendental deduction, though it is arguably the most important one. The identity of self-consciousness is set as the point of departure of Kant's official argument not for its indispensability, but for its feasibility. The identity of self-consciousness does not only lay a positive claim to the necessity that is required by the transcendental deduction, but it constitutes the quickest and the most straightforward route to the synthetic unity. The choice of *explanandum* could be made not only of epistemic reason, but also out of pragmatic reason.

In line with my previous verdict, it seems that the argument from self-consciousness is not able to refute the Humean skepticism as well. Even if Kant makes an appeal to an apparently thin conception of self-consciousness, it does not imply that it could be accepted by the skeptics as well. It is doubtful whether the identity of self-consciousness stands beyond any possible doubt that could be raised by a Humean skeptic. After all, Hume's denial of personal identity so famous that it induces us to suspect that the identity of self-consciousness simply begs the question of Hume.

One might reasonably object that this explanatory reading does not fit with Kant's claim that self-consciousness, or pure apperception, is the highest faculty in cognition.²²⁸ As the highest faculty, the pure apperception should be the ultimate explanatory ground for objective representation, for which no further explanatory grounds could be given. According to the explanatory reading, every line of argument is the inference from consequence to ground; even the argument from self-consciousness is no exception. Accordingly, the argument from self-consciousness turns out to be an argument from the ultimate ground. Then, how could we possibly find further ground for an ultimate ground? Therefore, the explanatory reading fails at least in the case of the argument from self-consciousness.

I believe that this worry is misguided. The hierarchy of the grounding relation of *facts* should not be conflated with the hierarchy of the relation of *faculties*. To be sure, the *imagination* is a lower faculty relative to *apperception*. The explanatory reading does not challenge this. Rather, what it claims is that the *transcendental synthesis of imagination* is the ground of the *necessary unity of apperception*. Even if the pure apperception is the highest faculty, certain *facts concerning apperception* (facts like the self-ascription and the identity of self-consciousness) still could be given further explanation.²²⁹ Consider the following analogy: while God is absolutely foundational in a theological picture, not all facts concerning God are unexplainable.

²²⁸ Kant has various descriptions of the supremacy of apperception. See A125 and B134f.

²²⁹ Kant's claim that "the synthetic unity of apperception is the highest point to which one must affix all use of the understanding" (B134f) does not qualify as an objection. Although synthetic unity is a *fact* concerning apperception, what Kant intends to say here is that the metaphysical and synthetic use of understanding is prior to its logical and analytic use, and he leaves it untouched whether the synthetic unity of apperception needs further explanation. In other words, the supremacy of synthetic unity of apperception is *relative to the use for cognition*, rather than *per se*.

7.3 Self-Ascription and Consciousness

(a) The Criteria of Self-Ascription

As I have mentioned, I will not delve into the nature of self-consciousness; rather, I will merely address some aspects of self-consciousness that bear argumentative relevance. According to my interpretation, what is distinctive in Kant's approach to self-consciousness is his focus on the phenomena of self-ascription, which is couched in terms of the relation of consciousness to representation. The notion of self-ascription is not something new. Strawson helps in popularizing this term into Kant literature.²³⁰ It is widely used to describe a feature of self-consciousness. Yet, few have laid it at the central place of interpretation. On my proposal, the self-ascription of representation is a fact concerning self-consciousness, and it is a fact with which Kant starts his argument.

Let's first begin with the idea of self-ascription. The idea of self-ascription is preeminent in §16. The possessive form "my" or "mine" is restlessly repeated and stressed with the explicit technical device by Kant. The notion of the self-ascription of representations is understood in the sense of ownership. If something x is ascribed to someone s , then x is owned by s . Self-ascription is a species of ascription: if something x is ascribable to myself, then x is mine, or I can call x mine. The Kantian self-ascription is concerned with mental representations, rather than physical objects.²³¹ The above characterization merely captures the general idea of self-ascription, yet the specific criterion of self-ascription thesis leaves unexplored. The most natural proposal for the criterion of self-ascription seems to be as follows:

(Self-Ascription C1): A representation r is mine if and only if r exists in my sensibility.

The notion of sensibility is elusive, but it is apt to be reformulated in physicalist terms:

²³⁰ In his *Individuals* (1959), Strawson argues that self-ascription is essential to a theory of mental states. And then Strawson applies this idea into Kant's theory of consciousness. See Strawson 1966, 54-67.

²³¹ The notion of self-ascription has a particular use in literature on Kant's self-consciousness. The self-ascription should not be confused with the propositional attitude ascription, which is linguistically expressed by a sentence. On my reading, **I think** is not a propositional attitude. Rather, it is related to the possessive form of the first person pronoun 'I'.

(Self-Ascription C1*): A representation *r* is mine if and only if *r* supervenes upon a physical state of my body.

However, Kant does not pursue this route. Rather, he turns to a more controversial interpretation of self-ascription. The basic idea is that a representation is mine not for its being something “*in me*”, but for its being something “*for me*”. To decide whether a representation is in me seems to be an objective matter, while to decide whether a representation for me seems to be a subjective matter. Kant offers a consciousness-centered account of the criterion of self-ascription. Its formulation stands as follows:

(Self-Ascription 2) A representation *r* is mine only if *r* is able to be accompanied by consciousness.²³²

Kant himself offers two interpretations of the self-ascription claim. In the A-Deduction Kant’s first less well-known criterion of self-ascription is introduced in his argument from above. In a passage that bears striking resemblance with the famous beginning sentence in §16 in the B-Deduction, Kant writes:

All intuitions are nothing for us and do not in the least concern us if they cannot be taken up into consciousness, whether they influence it directly or indirectly, and through this alone is cognition possible. (A116)

In the footnote Kant makes an important clarification of what the consciousness refers to. Kant writes: “[a]ll representations have a necessary relation to a **possible** empirical consciousness: for if they did not have this, and if it were entirely impossible to become conscious of them, that would be as much as to say that they did not exist at all.” (A117) As Kant makes it explicit in the footnote, the consciousness in question is *empirical* consciousness and that *all* representation is accompanied by a *possible* empirical consciousness. Then we have the empirical consciousness criterion of self-ascription as follows:

²³² In this formulation I choose a more general term ‘consciousness’ rather than Kant’s original term ‘**I think**’ for making room for the following analysis of two rival notions of empirical consciousness and transcendental self-consciousness.

(Self-Ascription 2.2) For a representation r , r is mine if it is accompanied by a possible empirical consciousness.

It is noteworthy that the account centered on empirical consciousness is empirically adequate to explain the phenomena of self-ascription. One important reason is that it could satisfy the *universality* requirement of the self-ascription of representations. As long as each and every representation can be accompanied by empirical consciousness, I am justified to call all the representations to *mine*, though I am not in a position to ascribe representations to an identical **I**. At this very point, empirical consciousness and transcendental self-consciousness are empirically equivalent for explaining self-ascription.

Kant's more famous claim on the self-ascription thesis is located in the famous beginning sentence in §16 of the B-Deduction where Kant starts his argument with the discussion of the relation of transcendental original self-consciousness (the **I think**) to representations. The beginning sentence of §16 reads: "[t]he **I think** must **be able** to accompany all my representations". Another formulation of self-ascription is as follows:

(Self-Ascription) For a representation r , r is mine if it is able to be accompanied by transcendental self-consciousness (the **I think**).

(b) Elimination by Identity

Now Kant seems to give two rival criteria of the self-ascription of equal empirical adequacy, but it is far from his final answer. In spite of its empirical adequacy, Kant vehemently attacks the criterion of self-ascription centered on empirical consciousness. Although self-ascription is not a concern of empiricism, the account centered on empirical consciousness would be happily welcomed by empiricists, since it is consistent with the logical consequence of empiricism. In effect, this view is committed to the Humean bundle theory of self, according to which my self is nothing but a bundle of perceptions. Consequently, all my representation is accompanied by numerically different I_s , which are the instances of the empirical concept 'I'. Therefore, Kant's rejection of the criterion self-ascription centered on empirical consciousness is an implicit criticism of the empiricist bundle theory of self.

Kant explicitly rejects the criterion of self-ascription *twice* in the B-Deduction. Consider the following passage: “For the empirical consciousness that accompanies different representations is by itself dispersed and without relation to the *identity of the subject*.” (B133) After a few sentences comes a more explicit objection to this view, where Kant claims that empirical consciousness cannot suffice, “for otherwise I would have as multicolored, diverse a *self* as I have representations of which I am conscious.”(B134)

In spite of the terminological difference, the point of Kant’s objection is quite clear: the empiricist theory of self fails to attribute all my representations to *one and the same* self.²³³ Both quotations suggest that Kant is committed to the identity of self-consciousness, that is, *in some sense* there is only one and the same **I**. When the empiricist theory of self is rejected, Kant postulates that there is one and same representation “**I (think)**” that accompanies all my representations. In fact, Kant uses the explicit technical device to make explicit the numerical identity of self-consciousness by underlining “I” or “mine”. Like empirical consciousness, this representation can satisfy the universality requirement of the self-ascription thesis that *all* representation must be ascribed to myself. Unlike empirical consciousness, it also could satisfy the *identity* requirement of the self-ascription thesis that my representations must be ascribed to one *identical* self.

(c) The Objection to the Anti-skepticism Reading

It is doubtless that Kant rejects the view of multiple selves in favor of the identity of self. Now the question is that whether Kant is justified in doing so. Puzzlingly, Kant does not formulate any specific argument against the bundle theory of self. Instead, Kant simply asserts the identity of self-consciousness without argument. This compels one to think that the acknowledgment of the identity of self is one of Kant’s unjustified assumptions, which Kant takes for granted.

A popular view is that Kant’s argument should be understood as a project against Humean skepticism. If Kant cannot give any convincing argument against empiricist bundle theory of self, one might wonder how Kant’s argument from self-consciousness could be anti-skeptical at all, since Kant assumes precisely what skeptics cast into question. The anti-skepticism reading naturally

²³³ Kant often use subject, (my)self, and self-consciousness in the way as if they are the same thing. (B131-135) For the sake of brevity, here I also take Kant’s loose talks of subject, self, and self-consciousness as referring to the same thing. It does not mean that one cannot draw any subtle distinction between them. I suspect, however, that the distinction is not so much of the distinction between these different notions as that of the inner diversity of each notion.

results in the question-begging objection to Kant's argument. In fact, Kant has the least intention to throw himself into the radical skeptical scenario.

The dispute between Hume and Kant could not be settled down in terms of skepticism; their difference is instead rooted in profound assumptions and approaches. For Hume personal identity is a problem, whereas for Kant it is a premise.²³⁴ Hume regards his bundle theory of self as an *achievement*. Armed by his empiricist copy principle, Hume is convinced that if we do not have any idea of substance, then we do not have any idea of identity. By contrast, Kant views the bundle theory of self as a *deficiency that needs to be remedied*. Indeed, Kant rejects the rationalist view of personal identity in virtue of the substantiality of mind. Yet, Kant never hesitates in claiming that personal identity still holds in a significant sense, and that first person discourse makes perfect sense. Kant is convinced that there must be some theoretically satisfactory way to talk about the identity of the subject, some way that is immune from the charge of empiricism. As Kant argued the third Paralogism, personal identity should be understood as “[t]he identity of the consciousness of Myself” is “the logical identity of the I”, which should be distinguished from “the numerical identity of my subject” (A369).²³⁵

On my reading, Kant's assumption of the identity of the subject is guided by his philosophical intuition. Kant rests his objection on the intuition that the discourse of different *Is* is simply *incomprehensible*. Kant would say that the ordinary discourse involving self-reference presupposes the identity of oneself, that the commitment to a multiplicity of *Is* contradicts with the ordinary way of talk and renders *the singular first-person language* unintelligible, and that the talk of empirical consciousness without reference to the identity of subject commits one to absurdity.

(d) An Argument without Empirical Consciousness?

Before leaving this section, I would like to dispel the worry that Kant might give different accounts of the relationship between empirical consciousness and transcendental self-consciousness. This is by no means the only case that reflects the difference between 1781 and 1787 *Critique*; as we have seen in the last chapter, there also seems to be a difference in Kant's views on reproduction and association in both editions of the *Critique*.

In the important footnote to A117, Kant writes:

²³⁴ As Henrich notes, the identity of self is not a problem for him, but a premise for him. See Henrich 2008.

²³⁵ For a logical reading of Kant's personal identity see Rosefeldt 2000; for a metaphysical reading see Tester 2013.

All representations have a necessary relation to a possible empirical consciousness [...]. All empirical consciousness, however, has a necessary relation to a transcendental consciousness (preceding all particular experience), namely the consciousness of myself, as original apperception. (A117f)

In the A-Deduction transcendental self-consciousness is related to representations *via* empirical consciousness. Kant first links representation with empirical consciousness, and then he in turn links empirical consciousness with transcendental consciousness, and finally he draws the conclusion that empirical consciousness *presupposes* transcendental self-consciousness. In other words, no empirical consciousness is possible with respect to representation unless it has a necessary relation to transcendental self-consciousness.

In the B-Deduction transcendental self-consciousness is related to representation without reference to empirical consciousness. In §16 Kant starts his argument with the discussion on the original transcendental self-consciousness (the **I think**) as if transcendental self-consciousness is the only candidate to play the role of making representations genuinely mine. To be sure, Kant levels criticisms on empirical consciousness in his later discussion (B133, B134) in §16. As my previous formulations of self-ascription indicate, in this context Kant regards empirical consciousness as a *rival* to transcendental self-consciousness, and he mentions empirical consciousness in the service for the exposition of the indispensability of transcendental self-consciousness.

This discrepancy between the two editions in the account of the relation between empirical consciousness and transcendental self-consciousness might lead one to think that perhaps Kant changes his mind on the issue of the relationship between empirical consciousness and transcendental self-consciousness in explaining self-ascription. In my view, however, this difference is *not substantial*, but *methodological*. Kant's new presentation in the B-Deduction does not mean that Kant holds that empirical consciousness can operate independently of transcendental self-consciousness. In the B-Deduction Kant still insists that empirical consciousness is conditioned by transcendental self-consciousness. In the concluding section § 21, for instance, Kant writes that "the empirical consciousness of a given manifold of one intuition stands under a pure *a priori* self-consciousness, just as empirical intuitions stand under pure sensible one, which likewise holds *a priori*" (B144). What Kant does in §16 is to take the *shortcut* to circumvent the relevant account of empirical consciousness and turns himself directly to the indispensable role that transcendental self-consciousness plays in explaining the phenomena of self-ascription.

Again, I think it is necessary to distinguish an argument from an account. For the sake of *argument*, Kant is not obliged to offer an *account* that involves the relationship between empirical consciousness and transcendental self-consciousness. What Kant is required to do is to pick out from the theoretical resources the piece that is indispensable in *inference*. It is not Kant's job to show how the entire machinery of mind works. As I have indicated in the last chapter, the argument from below is more informative than the argument from above in telling us how the mind works.²³⁶

7.4 Aspects of the Self-Ascription Thesis

7.4.1 The Analyticity of the Self-Ascription Thesis

After clarifying Kant's conception of self-ascription, I will argue that the self-ascription thesis is analytic. For the argumentative purpose, I suggest that we should abstract other aspects of self-consciousness and attend to its *content*. In this light, Kant uses the "**I think**" to designate the content of self-consciousness. Therefore, the "**I think**" should be read as a *mark*, and, according to the self-ascription thesis, it is contained in all my representations.

The basic idea of the self-ascription thesis is that *all my representations are mine*. In this simplified formulation, the semantic and epistemic properties of the self-ascription thesis are appealing. On the one hand, it seems that the self-ascription thesis is universally and unexceptionally true; it is true not only of past representations, but also of future representations. On the other hand, it seems that we have *a priori* knowledge of the self-ascription of representations; we know *a priori* that all representations are my representations without knowing what they are and which they are.

Kant's precise formulation of the self-ascription thesis is more complex and more controversial than that all my representations are mine. Nonetheless, I believe that it is illuminating to read Kant's precise formulation of the self-ascription thesis to be analytic. Consider Kant's chief claims on the self-ascription thesis:

(T1) The **I think** must **be able** to accompany all my representations; (T2) for otherwise something that could not be thought at all would be represented in me, (T3) which is as much as to say that the representation would either be impossible or else at least would be nothing for me.) (B132)

²³⁶ Henrich argues that Kant employs the strategy of theory avoidance such that there he does not develop a theory of self-consciousness or subject and he does not allow a derivation of knowledge from the principle of self-consciousness. See Henrich 1992. However, I think Henrich's reading is loaded with too many post-Kantian receptions of Kant's self-consciousness. On my view, at least *the identity of* self-consciousness is a fact that is to be explained by a more fundamental fact, and therefore it is not a grounding principle.

Interestingly, this passage includes various characterizations of analytic truth. First, (T1) indicates that the self-ascription thesis is analytic in virtue of the containment of marks. As I have indicated, it is critically important to construe the “**I think**” as a mark, and it functions here as the predicate concept. The subject concept “my representations” is composed of two marks: “representations” and “my”. Therefore, the subject concept ‘my representations’ as a whole-representation conceptually contains the predicate concept ‘**I (think)**’ as a part-representation.

Furthermore, (T2) indicates that the self-ascription thesis is analytic in virtue of its relationship with the principle of contradiction. The logical feature of an analytic proposition is that the denial of it will entail a contradiction, and that is precisely what Kant indicates in the (T2) and (T3). (T2) is a negation of (T1) and (T3) as a complementary clarification of the consequence of (T2). Kant’s formulation of (T2) and (T3) seems to suggest that the self-ascription thesis is analytic. In addition to the logical feature, the modal formulation of necessity also seems to encourage an analytic reading. The “must” signifies the necessity of the thesis. Necessity implies apriority. Although apriority does *not* imply analyticity, it *indicates* analyticity.

For (T1): The previous reading concerns only with the *intensional relation of containment*. In the following I will give a more detailed account of why the self-ascription thesis is analytic with respect to the *intension* and *extension* of the subject and predicate concept. In order to make it more liable for further analysis, (T1) could be simplified and reformulated as:

(1) Necessarily, all my representations are thought by me.

In the course of simplification, I attend to the necessity or the strict universality of the self-ascription thesis by abstracting from the following two things. Firstly, I replace “accompanied by the **I think**” with ‘thought by me’, for the representation that is thought by me is equivalent to the representation that is accompanied by the **I think**. In the following 7.4 I will discuss Kant’s own view and the motivation behind it. Secondly, I abstract from the modal modifier “be able to”, so that the remarkable dual modal modification is simplified to one. I will delay my discussion on the problem of the modal modifier into the following 7.5.

The proposition is analytic only if the predicate concept ‘thought by me’ as a mark is *contained* in the subject concept ‘my representations’ as a whole. What is thorny here is that the subject

concept 'my representations' is ambiguous. When the subject-concept 'all my representations' is interpreted as 'all representations that are thought by me', then we have the claim:

(1.1) Necessarily, all representations thought by me are thought by me.

This claim is overtly analytically and tautologically true. However, this trivial reading is not what Kant has in mind. As Kant immediately shows in the next sentence (2), "something that could not be thought at all would be represented in me". Obviously, Kant is concerned with the relationship between something "represented in me" and something that could be thought. Then, the subject concept 'my representations' is interpreted not as 'representations that are thought by me', but as 'representations that exist in me', then we have the claim:

(1.2) Necessarily, all representations existing in me are thought by me.

For (T2): The negation of (1.2) reads as

(2) Possibly, not all representations in me are not thought by me.

Equivalently,

(2*) Possibly, some representation in me is not thought by me.

Obviously, (2*) is precisely what (T2) says. Since the predicate concept is not (at least overtly) contained in the subject concept, this claim appears not to be immediately analytic. Kant has even no slightest intention to claim that the notion of representations in me and that of representations for me are co-extensive. There exists an obvious gap between representations in me and representations for me. Then, how can the self-ascription thesis be analytic?

For (T3): The clarification in (3) seems to be a response to this non-analyticity objection. In (T3) Kant is clarifying what it implies *if* there are representations that are not thought yet exist in sensibility. Kant holds that the negation of the self-ascription thesis has two distinct consequences: (i) the representation would be “impossible”, and (ii) the representation would be “nothing for me”.

In the light of these two distinct consequences, Kant commits himself to the view that (2) as the negation of the self-ascription thesis includes two logically possible cases by dividing representations in me into two species: (a) the representations that are thought by me and (b) the representations that are not thought by me. Kant’s analysis in (T3) is clarified as well as complicated by (3). In the former case,

(1a) Necessarily, all representations in me that are *thought by me* are thought by me.

Again, this claim is an overtly analytic truth. The negation of (1.1) entails a contradiction that the representations in me would be thought by me and not thought by me at the same time. Therefore, the consequence of (3a) is that the representations would be *logically impossible*. In the latter case, by the negation of (2.2) we have

(1*b) Some representation that is in me *yet not thought by me* is thought by me.

The above claim is stunning, for it appears to suggest that the self-ascription claim is not an analytic truth. Therefore, the non-analyticity objection resurfaces that there is a gap between the representations *merely* in me and the representations thought by me. Obviously, it is conceptually possible that there are representations in me without being thought by me. The notion of unconscious representation is conceptually coherent. At least, the denial of it does not *prima facie* entail a contradiction.

Kant does not deny the possibility; rather, he even affirms the existence of unconscious representations. Unconscious representations are not only *conceptually coherent*, but also *actually existent*. They are nothing but one species of obscure representations, namely, the objectively obscure representations. Kant admits that there are a vast number of obscure representations in

our mind. For instance, Kant writes in §5 of the *Anthropology*: “[t]he field of sensuous intuitions and sensations of which we are not conscious, even though we can undoubtedly conclude that we have them; that is, obscure representations in the human being (and thus also in animals), is immense.” (AA 7:135) The existence of unconscious representations means that it contradicts with Kant’s theory of conscious representations. In other words, the proposition is not only *not analytic*, but also *not true* at all.

If this charge is fair, then the self-ascription thesis turns out not to be analytic truth. Kant does not overlook this possibility; his reply is that the representations existing in me yet not thought by me are simply “nothing for us and do not at least concern us” (A116). In a nutshell, Kant disqualifies those *representations in me* as *representations for me*. Since the representations that exist in me yet are not thought by me do not contribute to cognition, they are not qualified as my representation.

Underlying this move is Kant’s distinctive conception of the self-ascription of representation, which has been mentioned in last section. Kant makes the assumption that the criterion for some representation to *be mine* is not to be a representation *in me*, but to be a representation *for me*, namely, to be thought *by me*. The normative criterion of *meaningfulness* substitutes the descriptive criterion of *existence*. It is a normative claim concerning what *should* be classified as my representation in light of the stipulated definition. On this interpretation, for a representation the property of being mine is defined not in terms of its *existence*, but in terms of its *availability*. Strictly speaking, it is not a conceptual truth, but a conceptual truth against a theoretical background.

The claim (3b) that the representation would be nothing for me amounts to saying that (2b) it is *cognitively meaningless for me* that something that could not be thought would be represented in me at all. By the conjunction of the two cases, we have

(3) It is *conceptually impossible* or *cognitively meaningless for us* that something that could not be thought would be represented in me at all.

Or,

(3*) It is necessary or cognitively meaningful for us that everything represented in me *could* be thought.

7.4.2 The Modality of the Self-Ascription Thesis

In order to concentrate on the analytic nature of the self-ascription thesis, I do not take into account the complex modalities involved in it. In the following I will analyze the modal qualifications of the self-ascription thesis on the textual basis of the opening sentence of §16:

The **I think must be able to** accompany all my representations; for otherwise something would be represented in me that *could not* be thought at all, which is as much as to say that the representation would either be *impossible* or else at least would be nothing for me. (B131-132)

The complexity lies in that the modality in question is dual: it does not only contain necessity and possibility, but it is also expressed in the form of “the necessity of possibility”. The necessity of the possibility of the accompanying of consciousness is unmistakably continuous in both the A-Deduction as well as the B-Deduction. Kant writes respectively that “[t]he **I think must be able to** accompany all my representations” in the B-Deduction, and that “[a]ll representations have a *necessary* relation to a **possible** empirical consciousness” in the A-Deduction. For the present purpose I will concentrate on examining the meaning of the dual modal qualifications of necessity and possibility, and the motivations behind them.²³⁷

(a) Necessity

In the last section, we have tackled the question of the necessity of the self-ascription thesis in the context of the examination of its analyticity. Here I will briefly outline the necessity qualification of the self-ascription thesis and concentrate on the possibility qualification. I propose that the necessity (“must”) in question has a twofold meaning: the *necessity of consequence*, and the necessity derived from *analyticity*. In the first reading of the necessity indicated by “must”, the necessity indicates that the claim the “[t]he **I think must be able to** accompany all my representations” *logically follows from* the claim that “something that *could not* be thought at all would be represented in me”. In the second reading of the necessity in question, the claim that “[t]he **I think must be able to** accompany all my representations” is itself necessary, and its necessity is *derived from* the necessity the claim something would be represented in me that *could not* be thought at all, in the same way the truth of the former claim is derived from that of the latter one. These

²³⁷ See 6.5 for discussion of the similar modal complexities.

two readings are not incompatible, and the necessity can mean both at the same time. The second one is more indispensable, since the first one can be indicated by another expression such as “otherwise”.

(b) Possibility

Kant does not claim that the representations of which I *am* conscious are mine; rather, Kant claims that the representations of which I *can be* conscious are mine. At any rate Kant is not careless. His seriousness is evidenced in the recurrence of the modal restriction of possibility in his formulations concerning self-ascription. The question of possibility stands independently of the question of necessity, for the former has a quite different motivation from the latter. In fact, the difficulty of understanding the modal restriction of the self-ascription thesis lies mainly in the awkward possibility. On the one hand, the possibility requirement makes the self-ascription thesis too strong. Whether a possible mental state is mine seems to be entirely *irrelevant*, and even *counterintuitive*, to the idea of self-ascription. In a physicalist formulation of the self-ascription thesis, this problem is even more outstanding. For physicalists the mental states that count as mine are only those that supervene on my *actual* physical states. Our intuitive idea is that if there is no such actual mental state, there will be no actual physical states. In short, those mental states supervening on *possible* physical states are not mine.²³⁸ The possibility restriction runs counter to this intuitive idea. It is possible for me, for example, to be a winner of a gold medal in the Olympic Games and to have a mental state of experiencing the bliss. But why should this merely possible mental states of the bliss of being a winner of a gold medal in the Olympic Games be mine? They are the mental states of the actual winners of a gold medal in the Olympic Games. On the other hand, the possibility requirement makes the argument too *tricky*; it seems to suggest what is at issue is an unnecessarily all-encompassing self-consciousness. Henrich’s objection to the semantic analysis of self-ascription grows out of the worry that that would make the argument too easy.²³⁹ Then, what does Kant mean when he insists that the possibility of the consciousness in question is indispensable and integral to the self-ascription? What are the representations that are possible to be accompanied by consciousness? What are the theoretical motivations behind this move of adding this counter-intuitive modal modifier?

²³⁸ While the supervenience account of physicalism involves the modal restriction of possibility, yet that is irrelevant here.

²³⁹ See Henrich 1969.

In my view, it is difficult to offer a reductive analysis of the possibility of consciousness. The possible conscious representation is a representation that can become conscious without determining whether it is actually conscious. By this move, Kant extends the reach of consciousness from actually conscious representations to possibly conscious representations and thereby to broaden the range of representations that could become conscious.

In order to theorize Kant's idea, one natural move is to make an appeal to the Wolffian distinction between clear and obscure representation, which has been taken over by Kant for some time.²⁴⁰ In line with Leibniz, the Wolffian school interprets the clarity of representation in terms of its relation to consciousness; a representation is clear if it is conscious, and a representation is obscure if it is unconscious. According to this scheme, the representation that is actually accompanied by consciousness is a clear representation, whereas the representation that is not accompanied by consciousness is an obscure representation. The distinction between obscure and clear representation is not rigid; obscure representations *can* become clear. Hence, a representation that *can* be yet not has been accompanied by self-consciousness still belongs to obscure representation. The possibility of the transformation of a representation from obscurity to clarity seems to refer to nothing other than the possibility of *becoming* conscious of any representation.

This line of interpretation is generally plausible. However, we should be cautious about what the clear and obscure representation mean when we make an appeal to this distinction, because Kant's theory of clarity and obscurity is both historically and systematically complex.

The move to appeal to the distinction between clear and obscure representation in the above proposal suffers from an exegetical objection: even if in his early philosophy Kant takes over the Wolffian conception of clarity and obscurity, it does not follow that Kant still embraces this view on clarity and obscurity in the *Critique*. This objection is confirmed by the footnote in A117, where Kant writes that "it does not matter here whether this representation ([consciousness]) be clear (empirical consciousness) or obscure, even whether it be actual" (A117f). As it is indicated, the fact that Kant juxtaposes the distinction between obscure and clear consciousness and that between possible and actual one implies that these two distinctions are neither *co-intensive* nor *co-extensive*. The issue of whether the consciousness is actual is quite distinct from and more radical than the issue whether it is clear. The distinction between actual and possible consciousness must be operated in another dimension.

²⁴⁰ This view is defended by Grüne 2009, 36–40. This kind of textual evidence is often found in Kant's early writings.

In fact, Kant greatly modifies the Wolffian scheme, and develops his own more sophisticated version of clarity and obscurity in his mature philosophy. In §5 of the *Anthropology* first published in 1798 Kant writes:

A contradiction appears to lie in the claim to *have representations* and still *not be conscious of them*; for how could we know that we have them if we are not conscious of them? Locke already raised this objection, and this is why he also rejected the existence of representations of this nature. However, we can still be indirectly conscious of having a representation, even if we are not directly conscious of it. - Such representations are then called obscure; the others are clear[.] (AA 7:135)

Note that the concept of clear representation remains intact, while the concept of obscure representation undergoes considerable change. Kant's modification of the Wolffian definition of obscure representation seems to be motivated by taking into consideration Locke's famous objection that unconscious representation is conceptually incoherent.²⁴¹ While Kant seems to be convinced by Locke's argument that all representations must be essentially conscious, he is not thereby forced to discard the idea of obscure representation. The response Kant makes to this objection is to reformulate the distinction between clear and obscure representation within the domain conscious representation. Clear representations are those of which we are directly conscious, whereas obscure representations are not unconscious representations, but those of which we are indirect conscious. Indirect consciousness is perfectly compatible with actual consciousness. This indirectness of consciousness does not entail that the non-actuality of consciousness; rather, it entails the *actuality* of consciousness. The indirect consciousness means not unconsciousness, but consciousness in a particular manner. Therefore, the indirectness concerns not the *existence* of consciousness, but the *mode* of consciousness.

While this new conception is elaborated in the *Anthropology*, I believe that it has been operative in the 1781 *Critique*. When Kant says in the A-Deduction that "if they [representations] cannot be taken up into consciousness, whether they flow into it[consciousness] directly or indirectly" (A116), Kant holds that there are two ways in which representations are taken into consciousness: to flow into consciousness directly and to flow into it indirectly. By "taken into consciousness" Kant obviously means "actually accompanied by consciousness". Combined with Kant's explicit mention of clear and obscure representation in the footnote, it is reasonable to suppose that these

²⁴¹ On Kant's understanding, by detecting the apparent conceptual incoherence of unconscious representation, Locke obviously links consciousness to the notion of self-ascription in the sense of ownership. It is very plausible to suppose that Locke's awareness of and interest in the issue of the relationship between consciousness and representation is aroused by Descartes' original discussion. However, this idea of self-ascription never assumes a central place in the all-too important Cartesian *cogito* argument.

two ways of taking representations into consciousness are nothing but clear and obscure representations as defined in the *Anthropology*.²⁴²

Then, what is indirect consciousness, and how could we know that it exists? In the following passage Kant illustrates this point:

When I am conscious of seeing a human being far from me in a meadow, even though I am not conscious of seeing his eyes, nose, mouth, and so on, I properly conclude only that this thing is a human being. For if I wanted to maintain that I do not at all have the representation of him in my intuition because I am not conscious of perceiving these parts of his head (and so also the remaining parts of this human being), then I would also not be able to say that I see a human being, since the representation of the whole (of the head or of the human being) is composed of these partial ideas. (AA 7:135)²⁴³

As it reveals, Kant's idea of indirect consciousness is motivated by the pressure of his mereology and epistemology of intuition. In holding that if one does not have a conscious representation of any part, then it is incoherent for him to become conscious of the whole, Kant is committed to the assumption that *if* I am conscious of a whole-representation, then I am conscious of any part of the whole-representation. As far as mereology is concerned, some properties are transitive, that is, some properties instantiated by the whole are also instantiated by the part. For instance, if a surface is red, it follows that every part of the surface is red; if a land is mine, it follows that every part of the land is mine. However, not all properties are transitive; if a body is heavy, it does not follow that every part of the body is not heavy. For Kant, consciousness is a relational property akin to that of mineness since it is a mereologically transitive property. If the whole representation is conscious, it follows that every part-representation is conscious.²⁴⁴

This example bears directly upon the relationship between clear representation and *distinct* representation. It becomes apparent that what Kant has in mind is the *clear yet confused* representation when he introduces the idea of indirect consciousness. In a clear yet confused representation, I am directly conscious of the whole representation and distinguish it from another whole representation, but I am not conscious of the part of the whole representation *in the same way as* I am of the whole.

²⁴² In the 1787 *Critique*, Kant also explicitly affirms that even *some* obscure representations are conscious. (B144f-B145f)

²⁴³ For an illuminating similar text see the *Logic*: "We glimpse a country house in the distance. If we are conscious that the intuited object is a house, then we must necessarily have a representation of the various parts of this house, the windows, doors, etc. For if we did not see the parts, we would not see the house itself either. But we are not conscious of this representation of the manifold of its parts, and our representation of the object indicated is thus itself an indistinct representation." (AA 9:34)

²⁴⁴ As Kant indicates, clarity is not transitive. If a representation is clear, it does not follow that every part of the representation is clear. That is why a further distinction between distinctness and confusion is introduced.

In another sense, however, I am still indirectly conscious of and inferentially know the existence of other indistinguishable parts of the whole.

The manner of having the direct consciousness of representation radically differs from that of indirect consciousness. In the latter case, it is inferred that we *are* conscious of representation. According to the factivity of knowledge, it means that obscure representations exist. However, we are not in a position to know what it is like to have an obscure representation. The inferential conception of consciousness is counterintuitive; for what our ordinary intuition of consciousness captures is to the *immediate* epistemic access to some representation. By this move Kant broadens the ordinary notion of consciousness.

Despite some defects in the previous proposals, I think that we have already brought ourselves on the right track when we attempt to settle this issue by appealing to the Kantian notion of clarity and obscurity. As I have indicated, Kant has a highly sophisticated theory of obscure and consciousness, in which the notion of obscurity is strikingly multi-layered. The fact that indirectly conscious representation does not fit for the purpose does not imply that any species of obscure representation fails to meet the requirement.

I think that we could make intelligible Kant's motivation for imposing this modal qualification with reference to other modifiers possibility. The modal qualification of possibility does not merely occur in the context of possible consciousness or possible representation, and it also appears in a variety of contexts: the possible combination, the possible synthesis and, most famously, the possible experience. It is quite plausible to conjecture that these characterizations of the possibility make up a chain, and they are driven by the same motivation.

Kant's idea of possible containment could shed light on this problem. In the illuminating Reflection 1692 on logic, Kant writes: "[t]he distinctness is the clarity of the manifold in the representation of *a thing*, either that which is in the representations *actually* contained, or *can* be contained".²⁴⁵ Here Kant makes a distinction between the actual containment and the possible containment of the manifold in the representation of a thing. The representation of an individual thing is a *singular* representation, namely, intuition. Furthermore, the representation of a thing is a *whole* representation of which both intuitive marks are its parts. However, it is not yet a *complete representation* of a thing. A complete representation is a representation whose content is so rich that

²⁴⁵ The translation is mine. The German text reads as follows: "Die Deutlichkeit ist die Klarheit des Mannigfaltigen in der Vorstellung eines Dinges, entweder desjenigen, was in der Vorstellung wirklich enthalten ist, oder enthalten seyn kan." (AA 16:85)

it could only determine one thing in the world. While the singular representation is not a *part-representation*, it is a *part* of the complete representation.

In this light, I think that the purpose of adding the modal restriction of possibility is meant to open the possibility of attributing the unconscious representation to the actually consciously represented thing. The not contained yet containable representation is co-extensive with the not combined (in one intuition) yet combinable representation. In addition to clear representation, they are also the representations over which the categories quantify. The pressure of the being able to be conscious stems from the pressure of being containable, which in turn stems from its necessarily being part of a possible complete experience.

Now the question is why we have to stick to the idea of a complete representation or complete experience. For Kant human beings do not have a complete representation of a thing.²⁴⁶ On the one hand, we human beings are *representational animals*, but representation is essentially *intensional*. We cannot represent an object without the mediation of marks; we instead must represent the object in virtue of the marks or properties of a thing. On the other hand, a finite individual thing is composed of intrinsic or non-relational properties on one hand, and extrinsic or relational properties on the other hand.²⁴⁷ One cannot completely describe the history of one individual without any reference to other individuals since each individual stands in various relations. Therefore, the fate of the completeness of representation depends on the metaphysics of relations.

In Leibniz's system it is *metaphysically possible* for human being to be capable of a complete representation of a thing. For Leibniz, the relations among objects are not real but *ideal*. Consequently, all relational propositions could be in principle reduced into non-relational propositions. On the bottom level, the real world is consisting of monads, on which the phenomenal world ontologically depends. Everything in the world is synchronized clocks: agreement without interaction.

In Crusius and Kant, things are entirely different.²⁴⁸ All of them embrace the *reality* of the relational property and relations instantiated by individual things. The world consists of interconnected finite individual things. The interconnectedness is not merely spatial relations, but *real dynamical* relations. For instance, a house and another house are interconnected rather than isolated from each other. Although a house stands not in the inherence relation to another house,

²⁴⁶ Due to our historical finitude, we human beings can never have complete representation of a thing. But this is not the point Kant intends to make here.

²⁴⁷ Here I take intrinsic and non-relational to be equivalent, though a nuance is further detected and a subtle distinction is drawn by some philosophers.

²⁴⁸ For a useful study of German rationalist metaphysics see Watkins 2005.

but in the *community* relation with it. For *relational realists*, to have a complete representation of *one thing* is to have a complete experience of *everything in the world*.

While we human beings do not have *actual* complete representation, we do have the singular representation that *aims at a possible* complete representation. True synthetic propositions could always be attributed to the thing that is represented. These synthetic truths are based on the available clear part-representations of the thing. In addition to these truths, in both counterfactual and future contexts I could alternatively enumerate some other synthetic truths, which are based on the possibly yet not actually clear representations. And these new synthetic truths both should and could be attributed to the same subject(s). Therefore, Kant's addition of the modal modifier of possibility is motivated by the consideration that every unconscious representation can be attributed as a part to the synthetic unity of manifold in intuition as a whole.

7.4.3 A Global or Local Thesis?

Despite that self-ascription holds for all my representations, the room is still left for deciding whether Kant intends to make a global thesis or a local one. A global thesis of self-ascription is that Kant is focusing on all representations in the whole of experience. A local thesis of self-ascription is that Kant has in mind representation in *any arbitrarily selected* domain of the whole of the life experience. It should be clear that the local thesis and global thesis are equivalent. Either of them does not affect the previous contentions concerning self-ascription at all. What is at issue here is only the *focus* of Kant's formulation of the self-ascription thesis.

I propose that Kant intends to formulate a local thesis of self-ascription. To be sure, Kant opens §16 with “[t]he **I think** must **be able** to accompany all my representations”. It encourages us to read the self-ascription thesis to be a global one for all my representations *without further qualification*. In the following, however, Kant clarifies his position: “[T]hat representation that can be given prior to all thinking is called intuition. Thus *all manifold of intuition* has a necessary relation to the **I think** in the same subject in which this manifold is to be encountered.”(B132)

In fact, Kant has done the very same thing in the argument from above in the A-Deduction, which starts with: “[a]ll *intuitions* are nothing for us and do not in the least concern us if they cannot be taken up into consciousness” (A116). Kant narrows the domain of the self-ascription thesis by further identifying the representation in question as the representation given *in intuition*, and other representations such as concepts, judgments and inferences are excluded for the purpose of the

present concern.²⁴⁹ Here intuition does not refer to the conscious representation of an object. At the beginning of Transcendental Deduction, the thesis of the unity of intuition has not yet been established before the introduction of the unity of self-consciousness. Rather, the intuition refers to the indeterminate intuition, i.e. intuitions that have not been determined by categories. More precisely, an indeterminate intuition is merely a *spatial or temporal mereological sum* of manifold representations contained therein. In other words, they are blind intuitions: confused and without order.²⁵⁰

The repeated reference to intuition is by no means an accident. It instead can be systematically found in Kant's texts. Almost each of them is formulated with great carefulness and precision. In fact, Kant has done the very same thing in the argument from above in A-Deduction, which starts with: "[a]ll *intuitions* are nothing for us and do not in the least concern us if they cannot be taken up into consciousness" (A116). In what follows §16 Kant writes: "[f]or the manifold representations *that are given in a certain intuition* would not all together be **my** representations" (B132) and "[n]ow this principle of the necessary unity of apperception... declares as necessary a synthesis of the manifold *given in an intuition*" (B135).

This kind of formulation extends far beyond § 16. In the concluding § 20 Kant opens with "[t]he manifold that is *given in a sensible intuition* necessarily belongs under the original synthetic unity of apperception" (B143). In the transitional §21 it is started with "[a] manifold that is contained in an intuition that I call mine is represented as belonging to the necessary unity of self-consciousness" (B144).

From the above overwhelming textual evidence it can be safely concluded that in the B-Deduction the self-ascription thesis is meant to be a local one, which focuses on the manifold representations given in some unspecified intuition, rather than on the entire mental life. If it is the local thesis that is at issue, and if this argument is successful, then the conclusion of this argument is only temporary: it will be that categories must be applied to all the manifold representations *given in certain intuition*. In order for categories to be valid of all objects of experience, Kant must make a further trivial inference on the premise that the sum of the representations in my conscious life experience is nothing but the conjunction of every intuition.

²⁴⁹ These kinds of representations are nevertheless mine in proper sense.

²⁵⁰ It seems that both metaphysical reading and epistemic reading of blindness are available. According to the epistemic reading, blind intuitions are conceptually unspecified intuitions. According to Allais, "intuitions are blind in the sense that they do not present objects as classified or as subject to the normative requirements of inferential judgments". (2015, 152-153). I subscribe to the metaphysical reading, according to which blind intuitions are uncategorized intuitions.

In addition to the identification of the local formulation, the explanation of the motivation of the local thesis is still in order. To elucidate this issue is crucial to understand the next step of Kant's argument, namely, how the analytic unity self-consciousness is grounded in its synthetic unity. As Kant repeatedly emphasizes, representations are essentially composite, and every intuition has a manifold. Due to their composite nature, every representation except the simple representation **I**, has a manifold in itself, no matter it is empirical or pure, sensible or intellectual. The move from intuition to *the manifold in* intuition seems to be no surprise.²⁵¹ As we will confirm in the following section, the unity of intuition is Kant's immediate concern. What Kant does is to make sharp the problem of the one and many in his own manner. Therefore, it comes as no surprise that the ancient philosophical question "the one and many" reemerges in the B-Deduction in a representational cloak.²⁵²

7.5 The Analytic and Synthetic Unity of Self-Consciousness

7.5.1 Analytic and Synthetic Unity: The Various Meanings

There are various kinds of the relations of unity to manifoldness. One distinctive feature of Transcendental Deduction in the 1787 *Critique* is that Kant introduces the conceptual tool of the analytic unity and the synthetic unity of self-consciousness. Kant highlights this distinction between two kinds of unity in the hope of clarifying the obscurities in the A-Deduction; specifically, they are introduced to bridge the inference from the *identity of self-consciousness* to *synthesis*.

This pair of terms are coined by Kant himself, but the ideas are not utterly new. As I understand, analytic unity is akin to the problem "the one and many" in ancient philosophy, and the idea of synthetic unity could be found in early modern philosophy and particularly in Leibniz.²⁵³ Dickerson suggests that the problem of the synthetic unity of apperception in Kant is the representational parallel of that of the unity of proposition in early analytic philosophy. This is an interesting proposal, but I believe it is mistaken. It is mistaken not in that the unity of proposition is anachronistic, but in that it is *unproblematic* for Kant. The unity of judgment as the representational analogue of proposition is not a problem to be solved, but a premise to start with. The analogy to the unity of proposition is also inappropriate. Not all complex entities are propositionally structured, and therefore not all the unity of complex entities stem from the unity of proposition.

²⁵¹ One might wonder whether categories are composite. My view is that at least some categories are composite. As Kant illustrates, the concept of causation include both the mark of necessity and the mark of positing rule.

²⁵² For Guyer's objection to the inconsistency of the domain see Guyer 2006 and Guyer 2010.

²⁵³ See Puryear, 2006.

The category of magnitude and its instance house will serve as a powerful counterexample to the propositional reading.²⁵⁴

On my reading, the structure of intuition and the structure of judgment are quite different, though they are correspondent. In the course of the argument, one of Kant's aims is to explain how the unity of intuition is generated. If we are asked to find some analogue to the Kantian intuition, I believe it would be the Leibnizian notion of the complete concept.

Remember that the outline of the argument runs as follows:

- (1) Necessarily, all my representations have analytic unity. (Self-Ascription)
- (2) Analytic unity implies synthetic unity. (Assumption)
- (3) Necessarily, all my representations stand in the synthetic unity of intuition.

In the above section I have offered a detailed analysis of the claim (1) that it is analytically and necessarily true that all my representations in an intuition contain the possible **I think**. As we will see later, (1) is equivalent to say that (1*) necessarily, all my representations have analytic unity. In the following I will further analyze (2) the principle of the priority of synthetic unity to analytic unity. In the course I will first clarify the *meaning* of analytic unity and synthetic unity, and then examine the different lines of the arguments for this principle.

First of all, I would like to propose that Kant's notion of analytic unity and that of synthetic unity are systematically ambiguous. Kant's terminological ambiguity does not imply that Kant is playing the trick of equivocation. Rather, it reveals that Kant himself is not always clear and careful. On some occasion Kant is misled by the complex ambiguity of analytic unity and synthetic unity.

In addition, I suggest that at least four lines of justifications for the priority principle of synthetic unity to analytic unity could be singled out. These lines of arguments are developed by drawing on the different senses of analytic unity and synthetic unity, and each of them can find its own textual support. However, I believe that the readings suggested by some most frequently quoted texts are misleading. The most promising line of thought that makes best of Kant's

²⁵⁴ See Dickerson 2003, 109-13. For a critical review see Rosefeldt 2007. For more details about my positive view see Chapter 8.

intentions is the most neglected, since it runs counter with some of Kant's most famous remarks. In fact, this line of argument displays the explanatory nature of Kant's arguments.

On the first reading, analytic unity is one in many, and synthetic unity is many in one. The former presupposes the latter. This is particularly supported by Kant's footnote in B133f-B134f. In spite of Kant's clarification, the presupposition is bogged into vicious circularity. On the second reading, analytic unity is the unity generated by analysis, and synthetic unity is the unity generated by synthesis. The former presupposes the latter. However, there is no such relation of presupposition could be found.

After the rejection of some rival readings, I propose one most promising reading which suggests that analytic unity and synthetic unity of self-consciousness are intensionally distinct but extensionally identical. This proposal is counterintuitive in that Kant's explicit statement that analytic unity *presupposes* synthetic unity implies that the two kinds of unity are numerically distinct, and therefore that they cannot be numerically identical. In spite of this exegetical problem, I believe that this is the only way to do justice to the entire line of the argument from self-consciousness in §16.

7.5.2 The Original Meaning of Analytic Unity and Synthetic Unity

What are analytic unity and synthetic unity? The quickest answer is contained in the apt slogan in *Metaphysik Mrongovius*: analytic unity is one in many (Eins in Vielem), synthetic unity is many in one (Vieles in Einem). (AA 29:889) In fact, like many terms, Kant's use of this pair of terms is far from consistent; for instance, occasionally he applies this distinction to the category of quality and that of quantity. Kant officially introduces the analytic unity and the synthetic unity of self-consciousness in the main text in §16:

Therefore it is only because I can combine a manifold of given representations **in one consciousness** that it is possible for me to represent the **identity of the consciousness in these representations** itself, i.e., the **analytical unity** of apperception is only possible under the presupposition of some **synthetic** one. (B133-B134)

According to this passage, the synthetic unity of self-consciousness refers to “a *manifold* of given representations **in one consciousness**”, and the analytic unity of self-consciousness refers to “**the identity of the self-consciousness in these representations** itself”, namely, “a *manifold* of given representations”. In *Metaphysik Mrongovius*, Kant identifies analytic unity is *one in many* and

synthetic unity is *many in one*. Initially, they are correspondent to the “many in one” and “one in many” characterizations.

It is remarkable that *both* synthetic unity and analytic unity are understood with reference to the relation of *one* to *many*. The *verbal* affinity between both slogans should not obscure the *substantial* complexities hidden behind them; the one is not a simple reversal of the other. For one thing, the one and the many in each phrase refer to quite different things in their own context. For another, the relationship between one and many differ in quality; it turns out that analytic unity is not “one in many”, but “one *over* many”, and that synthetic unity seems to be apt for both many in one and one in many.

As this footnote indicates, the synthetic unity and analytic unity are not merely abstractly understood as one in many and many in one. Rather, Kant gives the specific context to which this distinction could be applied, namely, the two species of cognition, intuition and concept. Consequently, the construal of them cannot be isolated from this motivational context. In order to appreciate the precise meaning of analytic unity and synthetic unity, we need first to make reference to the context where they are introduced. Kant’s most explicit discussion about this issue in *Critique* is located in the footnote of §17:

Space and time and all their parts are **intuitions**, thus individual representations along with the manifold that they contain in themselves (see the Transcendental Aesthetic), thus they are not mere concepts by means of which the same consciousness is contained in many representations, but rather are many representations that are contained in one and in the consciousness of it; they are thus found to be composite, and consequently the unity of consciousness, as **synthetic** and yet as original, is to be found in them. (B136f)

In his discussion of the nature of space and time, Kant offers a general criterion to differentiate intuition from concept. As Kant makes clear, in the case of an *intuition* many representations are contained in one consciousness, whereas in the case of a *concept* one same consciousness is contained in many representations. Many representations that are contained in one consciousness is the synthetic unity of self-consciousness, and one same consciousness in different representations is the analytic unity of consciousness. Accordingly, in the case intuition, many representations are not only contained in the same self-consciousness, but also contained in the intuition itself. In the case concept, many representations contain not only the same consciousness, but also the concept itself. Therefore, concept itself is an analytic unity, and an intuition itself is a synthetic unity.

In order to appreciate the meaning of analytic unity and synthetic unity, we must have a picture of Kant's representational mereology. One basic distinction Kant draws is the one between a *thing* and a *mark* (*Merkmal*). A thing is a whole-representation. Every whole-representation has its part-representations. Kant's technical term for part-representation is 'mark'. A mark is a part-representation of a whole-representation.

Now it becomes apparent that while in the original context both "many" are regarded as many representations, they mean quite different things. In the case of analytic unity, many in one means *many marks in one thing*, or many part-representations in one whole-representation. In the case of synthetic unity, one in many means *one mark in many things*, or one part-representations in many whole-representations.

In the above clarification the meaning of thing in two formulations is univocal. A thing is an object of intuition. However, Kant is often trading on the intuition itself and the object of intuition, or the intuited and the intuiting. Hence, a thing is simply identified as an intuition when this intuition is taken as the *intuited*. However, things are complicated by the fact that the meaning of mark itself is systematically ambiguous. A mark can mean the discursive mark, i.e., *a concept* of a thing. For instance, a concept 'red' is a discursive mark of a red apple, and it is a mark *common* to a red apple, and to a red table. A mark can also mean, in a more significant yet less conspicuous sense, intuitive mark, i.e., *a proper part-representation* of a thing, or a part of the *representational content* of the whole-representation.²⁵⁵ For instance, a nose is an intuitive mark of a head. To a further specification, analytic unity means *one discursive mark in many things*, while synthetic unity means *many intuitive marks in one thing*.

In the case of synthetic unity, the intuitive mark as a part-representation is relative to a thing as whole-representation. For example, while a nose is an intuitive mark of a head, a head is an intuitive mark of the body. In other words, *every intuitive mark is essentially a thing*. In the case of analytic unity, by contrast, the discursive mark as a part-representation has a twofold relationship

²⁵⁵ Here I use representational content (*Inhalt*) in a characteristic Kantian sense, which should be distinguished from mental content or representational/intentional content in the contemporary philosophy of mind. The Kantian content is contrasted with scope (*Umfang*). Originally, Kant introduces this pair of terms in his discussion on the concept. And the notion of content is indispensable for drawing the distinction between analytic and synthetic judgments. I believe that it could also be applied to intuition. Content is the intensional content of a representation in virtue of which the scope of the representation could be determined. In fact, sometimes *Inhalt* and *Umfang* are translated as intension and extension. In a nutshell, the Kantian contents are *mental entities*. By contrast, the mental content in philosophy of mind is the object or state of affairs represented by the mental states, and these correlates of mental states are a set of accuracy conditions of mental states, which are usually taken as *abstract entities*. The Kantian notion of scope is not synonymous with the mental content either, since the scope of a representation is primarily the *spatiotemporal object*. In order to terminologically keep them apart, I will call the former representational content or content complemented with the German word in bracket (*Inhalt*), and reserve mental content or intentional content for the latter.

to a thing *or* a concept as a whole-representation. Like the intuitive mark, the discursive mark is also a part-representation relative to a thing as a whole-representation. In a more proper sense, it is relative to a complex concept as a whole-representation, for a discursive mark is essentially a concept.

Obviously, one intuitive mark is correspondent to a discursive mark, but the former is *not identical with* the latter. Otherwise, it amounts to a conflation of a thing with a concept. Unfortunately, Kant sometimes seems to make them numerically identical by sliding from one sense of mark to another. For instance, Kant writes in this footnote in §16: “I thereby represent to myself a feature *that* (as a mark) can be encountered in anything, or combined with other representations” (Bf133-134).²⁵⁶ According to my previous interpretation, the meaning of represented “mark” in the quotation is ambiguous. A mark that can be encountered in anything is a discursive one, whereas a mark that can be combined with other representations is an intuitive one. The word token “that” is striking, for it suggests that the mark that can be encountered and the mark that can be combined are assumed to be identical. Since the mark refers to the discursive mark, the mark that is combined should also refer to the discursive mark. This line of reading is enhanced by the following asymmetrical fact: an intuitive mark could not be encountered in others, since an intuitive mark can never serve as the common mark, while a discursive mark could be combined with others regardless of whether it is a common mark.

In spite of its plausibility, I believe that it is misguided to read the second mark as a discursive mark that can be combined with other concepts. It is true that a discursive mark as a concept can of course be combined with other discursive marks to constitute a complex concept, no matter whether its object can be instantiated or not. Nonetheless, the combination of discursive marks is trivial; it is derived from the case where an intuitive mark is combined with other intuitive ones. Obviously, when Kant talks about analytic unity, he is preoccupied with the relationship between concept and thing, rather than that between concept and concept. (B133f-134f)

A further point implicitly made by Kant is that despite *the correspondence* between the discursive mark and the intuitive mark the former arises not directly from the former, but from the whole-representation of which the latter is merely a part. For example, the concept ‘red’ does not arise from the intuition of redness; for there is simply no such common thing as the redness repeated in many red things. Rather, it arises from the particulars such as a red apple, a red table, etc. in virtue

²⁵⁶ Note that the translation of Cambridge edition adds a “that”. The original German text reads as “die (als Merkmal) irgendwo angetroffen, oder mit anderen Vorstellungen verbunden sein kann.”

of the comparison, reflection and abstraction. This point is particularly important for the following argument.

7.5.3 The Relationship between One and Many

In spite of the directional difference, the same “in” in “many in one” and “one in many” invites people to take them to be synonymous. Again, I propose that the way different representations are contained *in* one intuition is qualitatively different from the way one concept is contained *in* different representations: in the case of synthetic unity different intuitive marks are *really contained* in the intuition, whereas in the case of analytic unity the concept is *logically or ideally contained* in different things. Or rather, the analytic unity is *one over many*.

The relationship between many and one in synthetic unity is defined in strict mereological terms of part and whole, whereas the relationship between many and one in analytic unity is defined in metaphysical terms of particular and universal. In the case of synthetic unity many different individual representations are *literally* contained in the intuition as different parts of a whole. For instance, eyes, nose, and mouth are literally contained in the intuition of a head. In the case of analytic unity, however, different representations are not literally contained in the common concept; rather, they are merely different *instances* of a universal. For instance, a red apple, a red table, and a red flag are contained in the discursive mark of red *not* as its parts; rather, they are instances of the universal of red.

Not only is a discursive mark not literally contained in many things, but it is also not *otherwise metaphorically* contained in them. The above strict mereological sense of parthood is not the only way to say that some part is contained in a whole. In a loose sense, a property could be viewed as metaphysically contained in a substance. In Aristotle, an accidental property is *in* a substance, whereas an essential property is *said of* a substance.²⁵⁷ However, this kind of statement makes sense only if the underlying metaphysical theory of universal is realism. With regard to the problem of universal, the mainstream modern tradition is precisely anti-realism. Following Leibniz Kant is a committed *conceptualist*.²⁵⁸ Conceptualism draws a middle way between realism and nominalism. Conceptualism consists of the following claims: (1) universals exist; (2) universals are concepts,

²⁵⁷ For instance, Duns Scotus holds that in spite of its numerical singularity, universal is *divisible*, otherwise it would collapse into a particular. Consequently, Scotus concludes that a universal has parts in the particulars that instantiate it.

²⁵⁸ For an excellent discussion on Leibniz’s conceptualism or nominalism see Mates 1989. Perhaps Kant becomes more or less controversial when it comes to the issue of the concepts of understanding, but it is clear that when it comes to empirical concepts Kant is not an exception to the mainstream nominalist modern tradition.

which are mental entities; consequently, (3) universal does not exist independently of us, not to mention its *repeatability* in particular instances. Therefore, for Kant concept is neither literally nor metaphorically contained in many instances.

In another place, Kant uses different, and less confusing, terminology to explicate the difference in the “contained in” relation respectively in the analytic unity and the synthetic unity of representation. In the fourth argument for space (and time) in *Transcendental Aesthetic* in the 1787 *Critique* Kant writes:

Now one must, to be sure, think of every concept as a representation that is contained in an infinite set of different possible representations (as their common mark), which thus contains these **under itself**; but no concept, as such, can be thought as if it contained an infinite set of representations **within itself**. (B39-B40)

The distinction between “contained under” and “contained in” relation is introduced to serve as the criteria to distinguish whether a representation is an intuition or a concept. Kant embraces the following scheme: for any representation x , if different representations are contained under the representation x , then x is a concept; if different representations are contained in x , then x is an intuition.²⁵⁹ Accordingly, it is not difficult to see that the within-containment is characteristic of the analytic unity of concept, whereas the under-containment is characteristic of the synthetic unity of intuition. To say that many representations are contained *under* one concept is to say that one concept is *over* many representations. The precise formulation of analytic unity is not the slogan of “one in many”, but “one over many”.

7.5.4 The Analytic Unity and the Synthetic Unity Extended

In spite of the original context of analytic unity and synthetic unity, Kant seems to use the analytic unity and synthetic unity in other senses. Remember how Kant introduces the analytic unity and the synthetic unity of self-consciousness in the main context in §16:

Therefore, it is only because I can combine a manifold of given representations **in one consciousness** that it is possible for me to represent the **identity of the consciousness in these**

²⁵⁹ It is on the basis of this distinction that Kant infers that space and time are not concepts but intuitions, since they fall under the latter category. For the present purpose I will delay this to Chapter 9.

representations²⁶⁰ itself, i.e., the **analytical unity** of apperception is only possible under the presupposition of some **synthetic** one. (B133-B134)

In the previous attempt I understand analytic unity and synthetic unity merely in the light of their *original* meaning. In this specific context, Kant conveys something more than that; he seems to be trading on two senses of synthetic unity. Synthetic unity does not only mean “a manifold of given representations **in one consciousness**”, and it could also mean “*combine* a manifold of given representations **in one consciousness**”. Since combination is the German synonym of the Latin synthesis, synthetic unity is *the unity by synthesis*. The second generative conception of synthetic unity is not incompatible with the original conception of synthetic unity. Rather, the former is a further specification of the *ground* of the latter. That is, the synthetic unity of the manifold is *produced* by or *grounded* in the combination of the manifold representations in one self-consciousness. Accordingly, the synthetic unity in generative sense entails the synthetic unity in a mereological sense.

Analogously, the *generative* conception could be extended to analytic unity. Analytic unity is *the unity generated by analysis*. Kant has a broad conception of analysis which includes concept acquisition. Kant explicitly says that concepts “arise analytically” (A77/B103) with respect to their form. Here analysis refers to nothing but the three steps of Kant’s account of the logical origin of concept in his logic textbook: abstraction, comparison and reflection. The analytic unity is the unity of reflection.

In this quotation Kant identifies the identity of self-consciousness as analytic unity. It seems that Kant has two conceptions of analytic unity. The identity of self-consciousness is not the analytic unity of consciousness wherein a concept consists; nor is it the unity by analysis. Rather, analytic unity is used in a third different sense: it is *the unity by conceptual analysis*.

It is noteworthy that the original conception of analytic unity and its generative conception are closely connected; the semantic fact of analytic unity is metaphysically grounded by the generative conception of analytic unity.²⁶¹ However, it seems that the epistemic conception of analytic unity differs radically from the other two conceptions. Now the question is how the identity of self-consciousness can be understood as “one in many”, if it is not “one in many” itself or the ground of “one in many”.

²⁶⁰ Here “these representations” is the anaphor of the previous “a manifold of given representations”, namely, intuitive marks. Interestingly, Kant is sliding from discursive marks to intuitive marks, which is the opposite case to the sliding to discursive marks.

²⁶¹ It is not controversial that synthesis makes the synthetic unity possible.

On my view, while the analytic unity is not used in the original sense, the logical unity of empirical concept can be extended to the general meaning of “one in many”. In an analytic judgment, the predicate concept as a mark is contained in the subject concept, and it is identical in its being contained in the subject concept. It is identical to be instantiated in many instances of the subject concept. In the analytic judgment that ‘all red bodies are red’, for instance, the representation ‘red’ is identical and it is contained in all red things. It is “one in many” in the sense that it is one concept instantiated in many things. In fact, this conception of analytic unity is parasitic on the original conception of analytic unity.

Now we have three pairs of the conceptions of analytic unity and synthetic unity that could be presented in the following table:

	original sense	epistemic sense	generative sense
analytic unity	one in many	unity known by semantic analysis	unity generated by analysis
synthetic unity	many in one		unity generated by synthesis
		unity not known by semantic analysis	

7.6 The Argument via Analytic Unity and Synthetic Unity of Consciousness

7.6.1 Rival Readings

(a) Reading 1

After the clarification of the various meanings of analytic unity and synthetic unity, we are in a position to accomplish the principal task to *justify* (P2) the principle that the analytic unity of consciousness presupposes the synthetic unity of self-consciousness. In the above I have shown that the distinction between analytic unity and synthetic unity are introduced with a view to distinguishing concept and intuition. Along with this line of thought, the first justification of the general principle can be reconstructed as follows:

- (1) Every concept presupposes the analytic unity of consciousness.
- (2) Every intuition presupposes the synthetic unity of apperception.
- (3) Every concept depends for its signification on some intuition. (Principle of Signification)

(4) Therefore, the analytic unity of consciousness presupposes the synthetic unity of self-consciousness.

For (1): According to the account of the logical origin of concepts in his *Logic*, “1. *comparison* of representations among one another in relation to the unity of consciousness; 2. *reflection* as to how various representations can be conceived in one consciousness” (AA 9:94-95). It is noteworthy that both comparison and reflection are conducted with reference to “the unity of consciousness”. I believe that this unity of consciousness in the account of the logical origin of concept should be identified as the analytic unity of consciousness. As Kant further makes clear, “[t]his *logical* origin of concepts – the origin as to their mere form - consists in reflection, whereby a representation common to several objects (*conceptus communis*) arises”. Since the form of a concept is its universality, the analytic unity of consciousness is presupposed by the concept for its *existence* in the sense that without analytic unity there is no *universality* in concept which is *the way* a representation is related to object.

For (2): The difficulty of this argument is located in the understanding of the nature of intuition. Here intuition is the representation which has reference to an object, that is, the immediate and singular representation of an object, or the representation in which an object is given. It is not the intuition without unity in the manifold. The synthetic unity of self-consciousness is the very thing that produces the object for intuition and makes determinate intuition possible. Therefore, the synthetic unity of self-consciousness is presupposed by intuition for its *existence* in the sense that without synthetic unity there is no *object-reference or relation to object* in intuition.

For (3): For a same represented object, an intuition differs from its corresponding concept merely in its form not in its matter, i.e., only in its universality not in its object. In the process from singular to general representations, only the form of cognitions is changed from singularity to universality, yet their matter remains to be the same and one object. Consequently, concepts *take over* their power of reference to objects from the corresponding intuitions. As long as those intuitions do refer to objects, their corresponding concepts refer derivatively to objects, too. Since the relation to object in all kinds of representations are derived from the immediate relation in intuition, without synthetic unity in intuition there is no object-reference or relation to an object in concepts, judgments or inferences.

For (4): What the conclusion says is not that analytic unity of consciousness depends for its *existence* on the synthetic unity of self-consciousness. Rather, it says that in order for analytic unity

to function, it must presuppose that the synthetic unity of self-consciousness has already been in play. It amounts to saying that the way of being related to object by discursive mark presupposes the relation to object. This point has been made clear in the previous discussion, namely what concept presupposes is not any intuitive mark but the synthetic unity of intuition where the intuitive mark is only a part.

Take in itself, this argument goes without objection. One merit of this line of argument is that it can do justice to *the original meaning* of analytic unity and synthetic unity by taking the mereological relation between intuition and concept into account. When this sub-argument is taken into a bigger picture, however, serious problems arise. Note that this sub-argument by appealing to intuition and concept is employed to justify the priority of the synthetic unity of self-consciousness to the analytic unity of consciousness and thereby to draw *the conclusion* (C3) that the manifold representations stand under the synthetic unity of self-consciousness. Along the above line of the justification for (P2), however, the priority of synthetic unity to analytic unity holds *only if the assumption* is granted that the manifold representations in intuition stand under the synthetic unity of apperception. This assumption turns out to be the very thing that Kant attempts to prove in the argument from self-consciousness, not that from which Kant proceeds to argue.

If the argument for (C3) and the argument for (P2) are taken together, the argument involves a circular reasoning where the conclusion implicitly appears in a set of premises. To make the logical circularity more explicit, let us see the following three claims:

(P2) Intuition presupposes synthetic unity of self-consciousness.

(1) holds only if:

(C3) Analytic unity of consciousness presupposes the synthetic unity of self-consciousness.

and (2) hold in turn only if:

(1) Intuition presupposes the synthetic unity of self-consciousness.

Kant endorses both that (1) implies (2) and that (2) implies (1). In confrontation with this circularity, there could be two responses: one could deny either the inference from (1) to (2) or the inference from (2) to (1). Since Kant's official line of reasoning is from the priority of synthetic unity to the synthesis of the representations in one self-consciousness, it is very natural to retain the inference from (1) to (2) and to deny the inference from (2) to (1), and thereby to deny the entire line of thought by appealing to the semantic priority of intuition to concept to justify the priority of synthetic unity.

Even if there is no circularity of the justification of the priority of synthetic unity to analytic unity, another objection to this line of argument is that Kant equivocates on the meaning of analytic unity, and thus commits to the fallacy of middle term.

(P1) The manifold representations given in intuition stand under the analytic unity of consciousness.

(P2) The analytic unity of self-consciousness presupposes the synthetic unity of self-consciousness.

(C3) Therefore, the manifold representations given in intuition stand under the synthetic unity of self-consciousness.

In this argument, the analytic unity of self-consciousness is the middle term of this syllogism. According to the various senses I have differentiated above, the analytic unity of self-consciousness in (P2) is understood in the generative sense, and it means the consciousness that makes the common concept possible. In (P1), however, the analytic unity of self-consciousness is understood in the epistemic sense, and it means the identity of self-consciousness in the manifold of representations.

Although the two occurrences of analytic unity in the two premises are not synonymous, it does not preclude the possibility that they are co-referential. The equivocation makes the argument invalid, but it does not immediately make the argument unsound. We need to prove that the generative conception of analytic unity and the epistemic conception of analytic unity are numerically distinct. Now it becomes apparent that this fallacy of equivocation in middle term is another reason to force us to discard the line of the justification of the priority of synthetic unity to analytic unity with reference to their motivational context of intuition and concept.

(b) Reading 2

I would like to dispel one easy way of justifying the priority of synthetic unity to the analytic unity of self-consciousness. According to this reading, it seems that the claim that the analytic unity of apperception presupposes the synthetic unity of apperception is a specific application of Kant's cherished principle in §15 that analysis presupposes synthesis, for which he explicitly clarifies that "where the understanding has not previously combined anything, neither can it dissolve anything" (B130). This line of thought does not resolve the problem, and it merely relocates the task of justification to the principle of the priority of synthesis to analysis. Again, a line of the justification of the principle of synthesis to analysis is to make an appeal to the priority of intuition to concept, which we have invoked in the previous reading. Along with this line we are adopting the generative conception of analytic unity and synthetic unity, according to which analytic unity has a straightforward relation to analysis as synthetic unity does to synthesis: synthetic unity is the unity produced by synthesis, whereas analytic unity is the unity produced by analysis. This move does nothing but to collapse the argument into the previous one, and consequently suffers from the previous problem of circularity.

(c) Reading 3

According to this second reading, the premise that the analytic unity of apperception presupposes the synthetic unity of apperception lacks adequate justification, and the inference from analytic unity to synthetic unity cannot be drawn as Kant suggests. Kant does not say how the inference from analytic unity to synthetic unity in the main text runs; rather he clarifies the relationship between these two kinds of unity in the footnote of §16, where the clearest hint is the following passage:

A representation that is to be thought of as common to **several** must be regarded as belonging to those that in addition to it also have something **different** in themselves; consequently they must antecedently be conceived in synthetic unity with other (even if only possible representations) before I can think of the analytical unity of consciousness in it that makes it into a *conceptus communis*. (B133f-134f)

In this passage “A representation that is to be thought of as common to **several**” refers to the analytic unity, and “those that in addition to it also have something **different** in themselves” refer to the synthetic unity. We can see from the text where the problem of the inference lies. It is doubtless that the simple representation of the **I think** and the manifold representations stand in the relation of analytic unity of apperception since the **I** can be encountered in each of **my** possible representation. If we accept the way that the analytic unity of consciousness presupposes the synthetic unity of apperception as Kant indicates, then at best Kant proves that a synthetic unity exists between *the one representation of the **I think*** and *the manifold representations*. But it does not follow that in addition to the **I think** *all the representations themselves* stand under a synthetic unity. What Kant gives is that if x is an analytic unity of consciousness then x stands in synthetic unity with all other different representations, say, a and b . What we need is rather that if x is an analytic unity then other different representations a and b , stand in synthetic unity. To make this inference valid, an additional premise should be invoked.

7.6.2 The Identity Reading Recommended

All the previous readings assume that the analytic unity of consciousness and the synthetic unity of self-consciousness are extensionally distinct. In the last reading, however, I will argue that the analytic unity and the synthetic unity of self-consciousness that are at play in the argument form self-consciousness are intensionally distinct but *extensionally identical*. We have a quick argument from the identity of self-consciousness to the indispensability of synthesis.

It has been shown that the synthetic unity of self-consciousness should be understood as many in one in the context of intuition. To be sure, the distinction between synthetic unity as “many in one” and analytic unity as “one in many” appears to be clear-cut. It turns out that the synthetic unity of self-consciousness could also be understood as “one in many”, and thereby it is liable to collapse into a form of analytic unity.

The analytic unity of self-consciousness is derived from the analyticity of self-ascription thesis which has been elaborated in detail in the last section. Remember the following line of reasoning concerning the concept ‘**I**’, the conceptual expression of self-consciousness. The proposition that all my representations are **mine** is analytic and known *a priori*, where the subject-concept ‘all my representations’ refers to many different representations, while the predicate-concept ‘**mine**’ refers to the same representation **I**, too. Every time when I encounter my representation I could analyze one **I** as its mark or part of its *representational content*. For instance, in my representation of the thing ‘a head’, I can always encounter a representation ‘**I**’. In every part-representation of the head, say,

a nose, I could encounter a representation ‘**T**’ as well. The representation **I** is contained in each of my representations, and in fact it is contained in all my representation. Consequently, the representation **I** can be regarded as “common to several”, which is a criterion of being analytic unity. Therefore, when analytic unity is understood in this epistemic sense, we can make intelligible why the identity of self-consciousness is a *kind* of analytic unity. This sign of identification turns out to be decisive for Kant’s following argument.

The most serious consequence seems to be that the difference between “many in one” and “one in many” is blurred. While it requires something more to claim that the epistemic conception of the analytic unity of self-consciousness *implies* the original conception of synthetic unity, the epistemic conception of the analytic unity of self-consciousness is *not incompatible* with the original conception of synthetic unity.

Fortunately, it turns out that the distinction between the synthetic unity and the epistemic conception of the analytic unity of self-consciousness could be retained. We have the following two arguments for the two criteria of synthetic unity. The first argument draws on the apriority of the unity of self-consciousness:

- (a1) If some unity is analytic in the epistemic sense, it could be either analytic unity as one over many, or synthetic unity as many in one.
- (a2) The unity is either of absolute universality or of comparative universality.
- (a3) If the unity is of absolute universality for the many, it is synthetic unity, and if the unity is of comparative universality for the many, it is analytic unity.

The enormous difference between the concept ‘**T**’ and normal concepts should not be overlooked. The empirical concept ‘red’ is instantiated in many red bodies. In fact, the instantiation of the concept ‘red’ is grounded in the logical procedure of comparison, reflection and abstraction of many different red objects. As analytic unity of concept, the empirical concept ‘red’ refers to a multiplicity of red things, and the multiplicity of red things all falls under and is unified in the concept ‘red’. Things are different in the concept ‘**T**’. While the concept ‘**T**’ is likewise instantiated in each of my representations, the identity of the **I** (self-consciousness) implies the uniqueness claim that there is only one such **I** (the self-consciousness). The numerical identity of self-consciousness contradicts with the numerical multiplicity of the referents of the empirical concept

'I'. 'I' as the pure concept refers to the unique individual the **I**. The pure concept 'I' does not refer to *the different empirical referents Is*. At best it refers to *the different occurrences of the identical referent the I*. Therefore, we have a second distinguishing criterion in terms of the *numerical identity of self-consciousness*:

(b1) If some unity is analytic in the epistemic sense, it could be either analytic unity as one over many, or synthetic unity as many in one.

(b2) The unity of self-consciousness is either identical or not.

(b3) If the unity is identical, it is synthetic unity; and if not, it is analytic unity.

With the aid of the identification of the epistemic conception of analytic unity with the original conception of synthetic unity, the argument from self-consciousness could be reformulated as:

(1) All my representations have analytic unity.

(2) The analytic unity of self-consciousness turns out to be a synthetic unity of self-consciousness.

(3) All my representations have synthetic unity.

(4) All my representations presuppose a transcendental synthesis of imagination.

In fact, we will see that Kant does not argue for the claim that the epistemic conception of analytic unity implies the original conception of synthetic unity and then further makes the inference that the original conception of synthetic unity implies the generative conception of synthetic unity. Rather, Kant takes a shortcut to directly argue that the epistemic conception of analytic unity implies the generative conception of synthetic unity. This line of reasoning has its peculiar difficulty: while it is easy to show the latter implies the former, it is not easy to show how the former implies the latter.

The ambiguity of the synthetic unity is not a coincidence in Kant's argument. In fact, it is paralleled by another ambiguity. It is with the help of this ambiguity that Kant's argument accomplishes his objective. The key text on this ambiguity is quoted as follows:

(I) The latter relation therefore does not yet come about by my accompanying each representation with consciousness, but rather by my **adding** one representation to the other and being conscious of their synthesis. (B133)

“The latter relation” refers to the relation to “the identity of subject”, or, more exactly, the relation of representation or empirical consciousness to the identity of self-consciousness. What precisely is the relation to the identity of self-consciousness? In my view, the relation to the identity of self-consciousness should be understood with reference to the opening sentence of §16 “the **I think** must be able to *accompany* all my representation”. Accordingly, the relation in question is one of the accompanying of all my representations with the **I think** (self-consciousness), which is the same with the analytic unity of self-consciousness in the *epistemic* sense.

Combined with this understanding of the “latter relation”, the sentence in the quotation can be paraphrased as: the relation of the accompanying of all my representations with the **I think** or the analytic unity of self-consciousness in all manifold representations “does not yet come about by my accompanying each representation with consciousness, but rather by my adding one representation to the other and being conscious of their synthesis”. Put it more concisely, a somehow paradoxical yet illuminating claim emerges:

(I*) The *accompanying* relation of all my representations with the **I think** does not come about by my *accompanying* each representation with consciousness.

It is paradoxical in that it sounds like there is a marriage relationship without marrying one to another. It is illuminating in that it reveals Kant’s most fundamental motivation to argue for the indispensability of synthesis. In order to make sense of this claim, it is natural to attribute an ambiguity to the notion of accompanying. The first accompanying is *the fact of accompanying*, whereas the second accompanying is *the act of accompanying*. As the term “come about” makes clear, the relation to the identity of self-consciousness is not given, but produced. The crux is that the *product* of the accompanying relation of the **I** to the manifold representations is not brought about by the *act* of the accompanying by consciousness.

It must be clear that we do not know *how* every representation is related to the **I think** as to consciousness. Rather, we just find *the result of accompanying relation* in virtue of the semantic analysis

of self-ascription. From this result, however, one cannot infer that it is *the act of accompanying* by the consciousness that is at play. The act of accompanying by consciousness is not a necessary condition for *the loose notion* of the self-ascription of any representation in me without the need to make reference to the identity of the **I**. As we shall see, it turns out that according to *the strict sense* of self-ascription to the identical **I** it is not even a sufficient condition.

This act-result ambiguity could be illustrated by a more ordinary example. For instance, in a running race one player A is running after another player B. On the basis of *empirical observation* (rather than conceptual analysis) we can say that A follows B in running. But the interesting thing is that from the following relation of A to B it cannot be inferred that *A follows B in virtue of A's following B*. Although it is a fact that A follows B, it does not imply *A intends to follow B*. A is striving for champion as well as B. The fact is that A and B has different running speed; and A follows B in virtue of its slow speed relative to B, not in virtue of his intentional peculiar running strategy:

- (1) A follows B because he is slower than B.
- (2) A follows B follows because he intends to follow B.

On my understanding, Kant makes a similar point here. The accompany relation does not come about by accompanying, but by synthesizing. I do not really *accompany* the **I** with different representations. That all my representations are accompanied by the **I think** does not mean that this effect is realized by the act of accompanying.

Kant's argument can be reconstructed as follows:

- (1) The analytic unity of self-consciousness can be explained by accompanying or by combination.
- (2) The analytic unity of self-consciousness instantiates some feature F.
- (3) The accompanying model cannot explain some feature F.
- (4) Therefore, the analytic unity of self-consciousness is explained by the combination model.

For (1): Unlike Kant's other disjunctive syllogism, the disjunction in (1) appears not to rest on the logical distinction and thus it seems to be not *a priori* true. Thus we do not know whether

the dichotomy between the accompanying is exhaustive, and we do not know whether there are still *other* models of explaining the phenomenon of the reference of all representations to me. If (1) is not *a priori* true, then this argument is an abductive inference in character.

Yet, it seems that Kant does not satisfy with the abductive reasoning. Rather, he wants the reasoning to be deductive. Note that Kant says that “it is only because I can combine a manifold of given representations in one consciousness that it is possible for me to represent the identity of the consciousness in these representations itself” (B133). Here Kant’s diction “*only because*” is interesting. Although it certainly indicates the necessary condition, it does not mean that no sufficient condition could be determined. Rather, it means that only necessary condition concerns him. It is not difficult to see that Kant’s actual commitment is to both the sufficient condition and necessary condition. As I have indicated, the generative conception of the synthetic unity of self-consciousness is the ground of its original conception, so it is unproblematic to make an abductive inference to the sufficient condition of the synthetic unity of self-consciousness in the original sense. Therefore, Kant here takes it for granted that synthesis is a sufficient condition for the synthetic unity of self-consciousness.

Furthermore, by “only because” Kant does assume that there are *only two* models that can account for the accompanying of representations by the I. To make (1) *a priori*, the following assumption could be attributed to Kant:

(1*) representations are taken up into consciousness either individually or collectively.

According to this assumption, there are only two ways in which a representation is taken up into consciousness: either it is individually taken into consciousness or it is collectively taken into consciousness. The individually making-conscious way and the collectively making-conscious way are correspondent to the two models for explaining the analytic unity in question. Thus, there are only two possible models that can account for the phenomena of the identity of self-consciousness with respect to the manifold representations.

For (2) and (3): Now Kant is obliged to provide philosophical reasons for his preference to the model of combining to the model of accompanying. He must show both (a) that the combining model is *as good as* the accompanying model in making I think to accompany my representation, and (b) that the combining model is *even better than* the accompanying model for other reason. Kant strategy is to show that the combining model is correct because it has more explanatory power.

The most important reason is that the empirical consciousness is by itself separate and dispersed. To accompany each of my representations with empirical consciousness cannot simply produce any genuine unity.²⁶² The second reason is less conspicuous. Kant repeats that representations belong to the self-consciousness in a strikingly *exhaustive* manner:

For the manifold representations that are given in a certain intuition would not *all together* be **my** representations if they did not *all together* belong to a self-consciousness[.] (B132)

[O]nly because I can comprehend their manifold in a consciousness do I call them all together **my** representations[.] (B134)

The correct model of mental activity that yields the analytic unity in the identical accompanying sense should be able to meet the exhaustiveness criterion of taking representations into self-consciousness. The accompanying model of mental activity cannot bring about the genuine exhaustive accompanying relation. The exhaustive or ubiquitous accompanying is precisely met by the *successive* character of synthesis, and it is only a consequence of combination. If our act is merely to accompany representation with consciousness (the mere act of accompanying can only be aided by consciousness, not by the **I**), then the act of consciousness without reference to self-consciousness is only *selective*. Only the *successive* synthesis can take all representations into the same self-consciousness without any *gap*.

²⁶² The “unity of association” (A121) is obviously too weak.

Chapter 8 The Argument from Judgment

8.1 Introduction

In contrast to the A-Deduction, the arguably most striking feature of the B-Deduction is the introduction and incorporation of judgment into the argument that is entirely absent in the A-Deduction.

Unlike the previous two lines of argument, the argument from judgment is not easy to be separated from the jungle of the Transcendental Deduction, since it is incorporated as a part of a larger argument in the Transcendental Deduction and it has to make reference to the Metaphysical Deduction. Unlike the previous two lines of arguments, we cannot find an independent official argument from judgment; instead, we can only formulate different versions of the argument with reference to judgment drawing on diffused texts.

In the dense section §16 Kant begins his transcendental deduction with the famous sentence: “[t] he **I think** must be able to accompany all my representations” (B131), and then he argues that the identity of self-consciousness presupposes, or includes, a synthesis, which ensures that all my representations are combined in one consciousness and thus are mine after all.²⁶³ If Kant were further to argue that the synthesis is governed by *a priori* rules, and these rules would be nothing other than categories, then this argument would turn out to be nothing other than a restatement of the argument from above in the A-Deduction. The perplexing fact is that, after the introduction of the notion of synthesis or combination in §16, Kant does not move his argument any further by following the suit, as if Kant has forgotten the efforts he has made in the A-Deduction. The even more perplexing fact is that in section §19 Kant makes an appeal to a full-blown definition of judgment. (B141) In the summary section §20, Kant continues to put judgment in the center of the discourse with no reference to the notion of synthesis, and it is only in this section, where categories are introduced for the first time into the argument in the B-Deduction.

In fact, the introduction of judgment in the B-Deduction might seem sudden, but it is not drawn out of air at all. It is a result of Kant’s series of previous enthusiastic attempts after the publication of the 1781 *Critique*, which are recorded both by his publications such as the *Prolegomena* (1783) and the *Metaphysical Foundation* (1786) and by his private notes compiled in *Reflections*.²⁶⁴ Before the 1787 *Critique*, Kant was deeply obsessed with the prospect of the theoretical potential

²⁶³ I take combination and synthesis to be synonymous. For textual evidence see §26 in the 1787 *Critique*.

²⁶⁴ See Guyer 2010 for the development of Kant’s published arguments centered on judgment between the two editions of the *Critique*. See R5925, R5928, R5929, R5931, R5932, and R5933 for the records of Kant’s exploration in his unpublished writings.

of judgment and he even promised in 1786 that “as I now understand it, [it can be solved with] just as much ease, since it can almost be accomplished *through a single inference* from the precisely determined definition of a *judgment* in general (an action through which given representations first become cognitions of an object)” (AA 4:475-476). Kant believes that the central status of judgment for the supposed success of transcendental deduction is beyond doubt.

One natural question is why Kant introduces judgment in his transcendental deduction of categories. A quick answer is that the introduction of judgment in the B-Deduction is intended to remedy the deficiency of the A-Deduction, namely, the sudden identification of categories as *a priori rules* of synthesis without adequate justification, which all the previous versions of argument in the last two chapters leave untouched. Since judgment is the birthplace of the category, it is quite reasonable to clarify the nature of categories and make use of the inner connection of categories to judgment. With the introduction of judgment, the argument in the B-Deduction acquires the virtue of making use the results in the Metaphysical Deduction to establish the link between synthesis and categories, which is entirely absent in the A-Deduction.

In the argument from judgment, Kant takes a *detour* to accomplish the argumentative objective. The aim of the Transcendental Deduction is to prove the validity of categories. As I have mentioned in Chapter 1, there is a systematic ambiguity in the notion of the “relation” or the “application” of categories to objects. It is with the introduction of judgment that the ambiguity displays itself clearer than anywhere else. In the previous attempts of argument, what Kant needs to do is to directly prove that categories *as conditions of synthesis* are instantiated by objects. By invoking to judgment, however, Kant must first prove that categories as higher-order concepts are employed in judgment, and then prove that categories as *real relational properties* are instantiated by things in space and time. In other words, the introduction of judgment presupposes a gap between the logical level of *judgment or thinking* and the metaphysical level of *thing*, or between truth and being.

In response to this problem, Kant makes an appeal to the Instantiation Principle in the hope of bridging the gap between truth and being. The basic idea of the Instantiation Principle is that what contributes to the truth of the judgment is instantiated in reality. As we will see, however, it turns out that the well-received Instantiation Principle is implicitly yet vehemently criticized by Kant’s insistence on the irreducible distinction between logic and metaphysics. And we will see how Kant takes pains to carefully modify this principle and make it accommodated to his most committed metaphysical assumptions.

In section 8.2, I will examine Kant’s two different conceptions of judgment and argue that they are compatible. In section 8.3, I will offer a detailed analysis of Kant’s identity thesis and the

complex issues involved in it, which lays a solid foundation for all the arguments with reference to the judgment. In section 8.4, I will argue that neither of Kant's two arguments by judgment intended by him is desirable. In section 8.5, I will review one argument from true judgment proposed by Guyer. In section 8.6, I will critically consider Van Cleve's knocking-down objection to Kant's argument. In 8.7, I will examine a more radical objection to the Instantiation Principle and then outline one argument from judgment that could do justice to both Kant's intention and the theoretical potential of judgment.

8.2 Kant's Conceptions of Judgment

Given that this line of argument is based on the notion of judgment, we must be clear what judgment is for Kant before analyzing the argument. Kant has two conceptions of judgment, and they will be examined in turn.²⁶⁵ The definition of judgment *in general* in Kant's *Logic* is spelled out as follows: "A judgment is the representation of the unity of the consciousness of various representations, or the representation of their relation insofar as they constitute a concept." (AA 9:101) This more mundane definition is supposed to be viewed as widely accepted by Kant's contemporaries in Germany. Since this mature definition as well as other similar definitions appears in his works on logic, we could call it the *logical definition* of judgment.

In the 1787 *Critique*, however, Kant offers another new definition in §19, which also contains Kant's most intensive discussion of judgment in the Transcendental Deduction. According to the new definition, "a judgment is nothing other than the way to bring given cognitions to the objective unity of apperception" (B141). Since this definition appears in his principal work on the characteristic transcendental philosophy and it is formulated with reference to the transcendental apperception, it could be referred to as the transcendental definition of judgment.

While Kant explicitly says that a judgment is "an action through which given representations first become cognitions of an object", in order to better appreciate Kant's motivation, it is worthwhile for us to have a survey of what precisely Kant has in mind when he understands "the precisely determined definition of a *judgment* in general" with reference to Kant's other works and the 1787 *Critique* in particular.

²⁶⁵ The distinction between a logical conception and a transcendental one of judgment is not rare. See also Longuenesse 1998. As we will see later, I would like to use this pair of labels to stress the different natures of the consciousness to which they make reference.

What is intriguing in this definition is the generic notion “cognition” and the defined notion “the objective unity of apperception”. As I understand, they are correlated to each other for some essentials of this definition. Let’s first consider the generality of the notion of cognition. At the first glance, it appears that by using the generic notion “cognition” Kant intends to remedy one of the deficiencies of the traditional definition of judgment he identifies early in §19. According to the traditional definition, a judgment “the representation of a relation between two concepts” (B140). Kant objects that this definition is too *narrow*; it can only be applied to one species of elementary judgment, i.e., categorical judgment. Understood in this light, cognition refers to objective representation in general, and both concepts and judgments are included. The use of the generic notion of cognition is meant to include judgments in order to make the definition extended and applied to complex judgments of hypothetical and disjunctive judgments.

However, a second reading shows that Kant is not interested in the incompleteness of the traditional definition of judgment at all. As Kant himself clarifies, he is not “quarreling here about what is mistaken in this explanation” (B141). In fact, for the sake of the simplification of the question, Kant even in the following takes over the idea or assumes that what is at stake is merely categorical judgment and that is adequate for the illustration of judgment in general. Rather, Kant is concerned with the question of “wherein this **relation** [(of the two concepts)] consists” (B141). In a nutshell, what Kant finds fault with the traditional definition is not that it is descriptively incomplete, but that it is explanatorily inadequate.

What does Kant mean by “the objective unity of apperception”? An immediate answer to this question is supposed to be the *logical form of judgment*, in which concepts are combined according to different logical functions. The logical form of judgment in turn consists in the analytic and logical unity of consciousness. However, Kant suggests here that what is at stake is the *objective* unity of apperception. Kant even reformulates the notion of the logical form of judgment in terms of the objective unity of apperception. As the title of §19 indicates, “[t]he logical form of all judgments consists in the objective unity of the apperception of the concepts contained therein” (B140).²⁶⁶ If the chief function of the objective unity of apperception is to contain concepts in it, then it is nothing more than an articulation of the traditional logical definition of judgment, and there is nothing particularly interesting in it.

Nevertheless, the suggestion in the title of §19 is somehow misleading. It turns out that the notion of the objective unity of apperception and the correspondent explanation of judgment are

²⁶⁶ Here concepts serve as counterexamples for my interpretation of cognition, yet they are nonetheless contrary to §20.

much stronger than that. The notion “the objective unity of apperception” is first introduced in §18, where Kant makes it clear that it is nothing other than the transcendental unity of apperception: “The **transcendental unity** of apperception is that unity through which all of the manifold given in an intuition is united in a concept of the object. It is called objective on that account[.]” (B139). By means of the objective unity of apperception, “the manifold given in an intuition” is united. What is peculiar to the definition of the judgment is its reference to the *unity of intuition*. Therefore, I contend that the *objective unity of apperception* should be distinguished from the *analytic unity of consciousness* in that what the latter stresses is that merely different *concepts* are united in a judgment.

This reading could be confirmed by other texts. In his following analysis of the example “Bodies are heavy”, Kant does not allude to the combination of concepts, nor to the comparison of concepts. Rather, he attaches emphasis to the combination of *intuitions*: “these representations... belong to one another in virtue of **the necessary unity** of the apperception in the *synthesis of intuitions*” (B142). Kant’s incorporation of the synthesis of the manifold intuitive representations into the definition of judgment is further confirmed by Kant’s reaffirmation and clarification of the new definition of judgment in §20: “That action of the understanding, however, through which the manifold of given representations (whether they be *intuitions* or concepts) is brought under an apperception in general, is the logical function of judgments (§19)” (B143). As Kant makes clear, the logical functions of judgment, or judgments themselves, could not only bring *concepts* under the unity of apperception, but also bring *intuitions* under the unity of apperception. This reading is consistent with Kant’s definition of judgment in *Metaphysical Foundation* as “an action through which given representations first become cognitions of an object” (AA 4:475-476).

Now we are in a position to explain what this “fully determined definition of judgment” that is introduced in *Metaphysical Foundation* and called upon in the 1787 *Critique* amounts to. Since the logical definition makes a claim to the combination of concepts, it appears to introduce a weak conception of judgment. Since the transcendental definition of judgment makes a claim not only to the combination of concepts, but also to that of *intuitions*, it appears to introduce a strong one. On my reading, the transcendental conception of judgment is not literally a *definition* of judgment at all. Rather, it is an *account* or an *explanation* of judgment.²⁶⁷ If there is an argument with reference to the transcendental conception of judgment, it is not an argument with reference to the definition of judgment, but an argument with reference to *the object-claim of judgment*. What it concerns is not *what judgment is*, but *how a synthetic judgment is endowed with the claim to object*. Accordingly, the logical

²⁶⁷ Indeed, Kant does not explicitly refer to it as definition, but as “explanation”, but this is not the reason why it is an explanation, for sometimes Kant uses explanation in a way similar to explication, and explication is closely related to definition. See R2950 (AA 16:585), R2994 (AA 16:606), and R3005 (AA 16:610-611).

and transcendental conceptions of judgment are not incompatible, since they are operated on different levels.²⁶⁸

In spite of the compatibility, the transcendental conception of judgment does bring about a tension in the Transcendental Deduction. The general picture emerges that Kant employs two kinds of conceptual resources in the first part of the B-Deduction. From §15 to §18 figures the notion of synthesis, while from §19 to §20 figures the notion of judgment. In the summary section §20 the notion of synthesis does not appear at all. With the development of the Deduction, it seems that the role of judgment is squeezing the space of that of synthesis. Consequently, what Kant brings into view is not the relation of self-consciousness to synthesis, but the relation of apperception to judgments. The relationship between judgment and synthesis stands in the center of Kant's theory of objective representation (cognition). Even in the 1787 *Critique*, Kant's suggestions on this issue are not always consistent. The question as to what the nature of the relationship between synthesis and judgment is must be answered.

The notion of knowledge is usually defined as the epistemically justified true belief. Judgment is a proposition-like entity, and therefore it is equivalent to belief. A true judgment of experience needs the testimony from experience, and thereby it is justified. Therefore, to have a true judgment of experience is to entertain or make assent to the justified true belief.

An argument from the true judgment of experience amounts to a judgment from *knowledge*. The premise is too thick to be accepted by the skeptics. The skeptics will not agree that the knowledge that "every body is heavy" implicitly uses the concept of causation, nor will they agree that some the state of affairs is presupposed as the correlate of belief. Then, the old objection appears again that Kant simply begs the question of the skeptics, and his anti-skeptical project is doomed at the very beginning.²⁶⁹

Again, as I have suggested, the argument from judgment should be primarily viewed as an attempt to explain judgment, or rather, to explain certain facts concerning judgment. In the case of self-consciousness, it is the ascription of representations to the identical self-consciousness that is at issue. In the case of judgment, as we will see, it is the claim of judgment to truth that is at issue. Construed in this light, the explanatory reading is perfectly amenable to the transcendental conception of judgment I have explicated above. In order to see how judgment must make

²⁶⁸ Nevertheless, the question of the claim of synthetic judgment to object is not thereby settled. In order to appreciate Kant's point, we must refer back to the background theory of judgment and that of combination.

²⁶⁹ This point is repeatedly made by Guyer, especially in his 1987.

reference to intuition, we must turn to Kant's critically important Identity Thesis in the Metaphysical Deduction.

8.3 The Identity Thesis

Kant's most systematic attempt to explain the relationship between judgment and synthesis and that between the forms of judgment and categories could be found in his Metaphysical Deduction. In an oft-discussed passage in §10, Kant articulates his Identity Thesis in the following way:

(T1) The same function which gives unity to the different representations **in a judgment** also gives unity to the mere synthesis of different representations **in an intuition**, which, expressed generally, is called the pure concepts of understanding. (T2) The same understanding, therefore, and indeed by means of the very same actions through which it brought the logical form of a judgment in concepts by means of the analytical unity, also brings a transcendental content into its representations by means of the synthetic unity of the manifold in intuition in general, on account of which they are called pure concepts of the understanding that pertain to objects *a priori* [...] (A79/B104-105)

The importance of this passage can hardly be overestimated. It reveals what Kant *assumes* as well as what Kant *argues for*. It *presupposes* Kant's theory of cognition, the mereology, the semantics, the epistemology of cognition, or *objective representation*, and meanwhile it constitutes an *explanation* of certain crucial points in Kant's theory of cognition. Relevant to our present concern, it includes a theory of judgment in view of transcendental logic. Given its overriding importance, I will offer a detailed analysis in what follows.

The passage consists of two sentences (T1) and (T2), and they basically express the same thing, despite the differences in detail.²⁷⁰ In this highly compressed passage, Kant addresses four kinds of relationship: (i) the relationship between different representations and judgment, (ii) the relationship between different representations and intuition, (iii) the relationship between making a judgment and building (*abbilden*) an intuition, and (iv) the relationship between forms of judgments and pure concepts of understanding.

The original context is meant to establish a parallelism between the table of forms of judgments and the table of categories. Therefore, Kant's original motivation is merely (iv): to

²⁷⁰ Longuenesse (1998) emphasizes the difference between the two sentences by arguing that (T1) expresses a symmetrical relation, whereas (T2) expresses an asymmetrical relation in a twofold sense. I would rather say that they are mutually complementary.

introduce the notion of categories in the context where the forms of judgments have been introduced. Nevertheless, question (i), (ii) and (iii) constitute the necessary backdrop of Kant's parallelism between forms of judgments and categories. To be sure, some attempts have been made to some extent in the last chapter. In this chapter, however, the formulation of the identity thesis, especially in the second sentence (T2), will give us a more complete picture of Kant's representational mereology. In the following I will offer a detailed analysis by addressing the four kinds of relationship.

8.3.1 Representations and Judgment

Kant has explained the relationship between concepts and judgments in the preliminary section "on the logical use of understanding" in *Analytic*. The expression "different representations in a judgment" is supposed to refer specifically to different *concepts*. Different concepts are unified such as to produce a judgment. If this reading is correct, then it can be assumed that Kant is referring to judgments *per se*, judgments without reference neither to subject nor to object.

Initially, the difference of concepts appears to mean something trivial. By "different" Kant is stressing the *numerical difference*, the opposite of numerical identity, as a demand on the plurality of the representations necessary for combination, for one single representation cannot be combined, and any minimum judgment needs *at least two* concepts. In my view, however, Kant's emphasis on the difference of representations implies something stronger than the mere negation of the numerical identity of representations. What Kant stresses is the *qualitative difference* in the *content* of concepts. The requirement of the numerical difference of concepts has already been expressed by the plural form of "representation,s". The requirement of the qualitative difference of concepts is expressed by "different". By "different" Kant intends to preclude the cases where one concept is identical with the other. As Kant's common practice, the identity of one concept with the other is not merely strictly identical such as 'extended' and 'extended', but one concept is analytically contained in the other such as 'extended' and 'body'. The requirement of qualitative difference is consistent with the constraint Kant imposes on the combination in general in §15 added in 1787:

Whether the representations themselves are identical, and whether therefore one could be thought through the other analytically, does not come into consideration here. The **consciousness** of the one, as far as the manifold is concerned, is still always to be distinguished from the consciousness of the other, and it is only the synthesis of this (possible) consciousness that is at issue here. (B131f)

Consequently, what the “function that gives unity to the different representations” can yield is only a *synthetic judgment*. In the previous section §15 “On the logical function of the understanding in judgments”, the table of judgments is true of judgment in general. At the very beginning of the section, Kant friendly reminds us that “we abstract from all content of a judgment in general, and attend only to the mere form of the understanding in it”. Both analytic and synthetic judgment share the same logical functions of judgment. Accordingly, the table of forms of judgment is located in *general logic*. At the beginning of section §10, by contrast, Kant explicitly restricts the discussion into transcendental logic:

Transcendental logic, on the contrary, has a manifold of sensibility that lies before it *a priori*, which the transcendental aesthetic has offered to it, in order to provide the pure concepts of the understanding with a matter, without which they would be without any content, thus completely empty. (A76-77/B102)

In spite of the fact that the function of understanding “that gives unity to the different representations” holds also for analytic judgment, the scope of the judgment implicitly narrows from judgment in general down to synthetic judgment, and, in fact, even to *empirical synthetic judgment*. With the change of the scope of judgment, the scope of Kant’s Identity Thesis in the Metaphysical Deduction changes as well. Whatever the Identity Thesis means, its truth holds *only* for synthetic and empirical species of judgments. One consequence is that while the logical forms are essential to analytic judgments, analytic judgments are made without reference to categories. This restriction the scope is further confirmed by Kant’s latter explicit reference to the manifold of intuitions.²⁷¹

As for the relationship between representations and judgment, (T1) clarifies the relationship between judgment and its logical matter. (T2) makes further clarification about the relationship between the logical matter and the logical form of judgment. As I have explained in Chapter 7, a concept is an analytic unity. Here I propose that a judgment in general is also an analytic unity. This analytic unity reading of judgment is even true of the synthetic judgment. In effect, (T2) makes the following claim that the unity given to different concepts is analytic unity, which is identical with the logical form of judgment.

²⁷¹ Consequently, transcendental logic is concerned with synthetic judgments, whereas general logic with judgment in general.

Longuenesse defends the unusual view that the unity in synthetic judgment is synthetic, for concepts are *synthesized* in one judgment.²⁷² As I have explained in the last chapter, however, synthetic unity is systematically ambiguous, and it does not always mean the *unity by synthesis*. Furthermore, even if synthetic unity means the unity by synthesis, the context to which it is properly applied is intuition, rather than concept or judgment. According to my reading, the principal difference between analytic unity and synthetic unity lies in that the former is *logical*, while the latter is *real*. My interpretation is confirmed by the identity thesis, where Kant identifies the unity given to different concepts in (T1) as analytic unity in (T2).

The judgment is an essentially *composite* representation. Concepts are immediate components of a judgment. Concepts are part-representations (*Theilvorstellung*) of which a judgment is a whole-representation (*Ganzvorstellung*). As a whole-representation, judgment is essentially different from a complex concept. Judgment is not only a whole representation, but also a *structured* representation. Every judgment has certain *logical forms* that are much more fine-grained than the logical form of the concept.

8.3.2 Representations and Intuition

Kant says that “[t]he same function [...] also gives unity to the mere synthesis of different representations in an intuition”. Here the function is operative not on the discursive level, but on the intuitive level. In the expression of “different representations in an intuition”, the generic notion “representations” does not refer to concepts, but to *intuitions*. Analogously, by “different” Kant intends to emphasize the qualitative difference between one intuition and another that one cannot be analytically contained in one representation. One might worry whether the idea of analytical containment can be applied to intuition in addition to concept. Since the notion of analyticity in Kant’s footnote in §15 is concerned with intuitive representations, this worry could be dispelled.

The second point is that the function brings the *manifold of intuitions* into the *unity of intuition*. This formulation is awkward, but the idea behind it is clear. On the discursive level, Kant explains what it is to make a judgment. Analogously, on the intuitive level, he explains what it is to build an intuition. The awkwardness lies in that it seems that building one intuition circularly presupposes

²⁷² Longuenesse argues that analytic unity is applied only to concepts, which are merely the means to generate the judgment as the discursive synthetic unity. The motivation behind Longuenesse’s move is her deep conviction that the judgment-making and the intuition-building are literally identical, and that this identity cannot be explained if we do not identify the unity in judgment as analytic. On the bottom level, the difference between Longuenesse’s reading and mine lies in whether the same action is literally the same. See Longuenesse 1998, 201.

the existence of intuition. This interpretation is not charitable to Kant. The more plausible reading is to suppose that the term ‘intuition’ is systematically ambiguous in Kant.²⁷³ Kant draws a terminological distinction between *intuition as manifold* and *intuition as unity*. It could be specified otherwise, for instance, as the distinction between indeterminate intuition and determinate intuition (A109), or as *uncategorized* intuition and *categorized* intuition. The analogue in pure representation is presupposed in the space arguments for apriority and the space arguments for singularity, and made explicit in the form of intuition and formal intuition, which I will discuss in Chapter 9.²⁷⁴ It turns out that the distinction is only conceptual, and in fact all manifold intuitions are unified by understanding. This, however, does not render the distinction useless.

The intuition as the manifold is a given fact, traced back to the affection proper to sensibility. The intuition as unity, by contrast, involves the collaboration between sensibility and understanding. The building of one intuition is not simply a naturalistic process to receive *a posteriori* stimulus. Rather, it is an intellectual achievement involving *a priori* processing.

As I have indicated in the last chapter, intuition is a whole-representation, which contains many marks as its part-representations. These marks are intuitive marks that should be distinguished from discursive ones, i.e., concepts. In addition, intuition is also a *structured* representation. In an important sense, intuitions stand in the *relation of space and time*. However, this is not our present concern. One intuition is structured in the sense that it stands in *both logical and real relation*. The real relations are nothing but those relations specified by categories, e.g., that of inherence, causation, etc.

8.3.3 Building Intuition and Making judgment: The Same Action Explained

What calls attention in the passage is Kant’s repeated insistence on the *identity* by phrasing “[t]he same function”, “[t]he same understanding” and “the very same action”. I propose that the issue concerning “[t]he same function” in sentence (T1) and the issue concerning “The same understanding” as well as “the very same action” in sentence (T2), albeit related, are distinct. The former is concerned with the relationship between the forms of judgment and categories, while the

²⁷³ Sellars is one of the earliest who acutely notes and draws the distinction between *intuition as manifold* and *intuition as unity*. See Sellars 1968, 2-8. The Sellarsian distinction is called into attention and developed by Haag 2007, with apt reference to Kant’s theory of part-and whole-representation. I think that Sellars is completely correct on this point. It is more profitable to disambiguate Kant’s notion of intuition, than, say, to disambiguate the notion of cognition or experience.

²⁷⁴ Allais offers a lucid account of in what sense the intuition alone could give object. However, it could be rejected by an intensional reading of Kant that there is no non-relational object. All representation of an *individual (particular)* must be taken under at least one *real relational description* with respect to the logical function of judgment. See 7.3.2.

latter is concerned with the relationship between judgment-making and intuition-building. I will first address the latter and then turn to the former.

In sentence (T2) the expression “the same action” is intriguing, for it involves two *conceptually distinct* kinds of actions, namely, the action that *making one judgment* and that of *building one intuition*. The action that “brought the logical form of a judgment in concepts” is nothing but making a judgment, while the action that “brings a transcendental content into its representations” is nothing but building one intuition. Now the question is how we should understand the action of building one intuition and that of making a judgment.²⁷⁵ There could be two general views concerning the issue.

On the first moderate reading, the identity between the making of one judgment and the building of one intuition is *original identity*, i.e., identity in origin. Both the action of making a judgment and that of building an intuition are traced back to a common source, namely, understanding, but they are *two distinct actions of the same source*. One characteristic feature of this reading is that one action is separable from the other. We could make a judgment without building an intuition, and we could build an intuition without making a judgment as well. At least one aspect of action presupposes the other: either (a) making a judgment presupposes building an intuition, or (b) building an intuition presupposes making a judgment. If either case hold, it suffices to establish the moderate original identity thesis.

On the second strict reading, the identity between the making of one judgment and the building of one intuition is *operative identity*.²⁷⁶ According to this reading, the making of one judgment and the building of one intuition are *two aspects of the same action*. The building of an intuition and the making of a judgment are intrinsically inseparable, and one function presupposes the other. There is no judgment without intuition, and there is no intuition without judgment as well. In other words, judging and intuiting are always simultaneous. One might make an appeal to the transcendental definition of judgment to justify the operative identity reading.

²⁷⁵ Recently, Longuenesse (1998), Haag (2007), and Grüne (2009) convincingly defend the two-aspect view of understanding.

²⁷⁶ Allison might be seen as a defender of this view. For instance, Allison claims that “it [the manifold of a given representation] is, *by the same act*, also unified in a judgment.” (2004, 177) While the context of Allison’s claim is the summary section §20, it is also applied to §10, since the argument in the former draws on the Identity thesis in the latter. Longuenesse’s view on categories and forms of judgment is intricate. On this issue, Longuenesse seems to embrace an operative identity view. For instance, Longuenesse holds that (T1) expresses a symmetry relation and that this symmetry “expresses the fact that the acts of thinking the discursive unity of concepts in judgment are *the same* as the acts of combining and ordering the sensible given in order to reflect universal representations combined in judgments” (1998, 200), and then she reaffirms this by saying that “the first expresses the identity between two acts of combination—the discursive combination of concepts and the intuitive combination of the sensible given” (1998, 201).

To attribute to judgment the operative identity is simply a misinterpretation of Kant's transcendental definition of judgment. What Kant means by the transcendental definition of judgment is not that judgment metaphysically determines intuition by itself, which is wildly implausible, but that judgment must semantically make reference to intuition, in order to make the claim to truth.

In spite of Kant's verbal indication of identity, the operative identity reading is too strong. Rather, I maintain that the original identity reading is correct. If the separation of the combination of intuitions from the combination of concepts is made, the ensuing question is what action is prior. My contention is that the building of intuition is prior to the making of judgment. We can build an intuition without making a judgment, but we cannot make a judgment without building an intuition.

On my view, the building of one intuition does not presuppose making a judgment. As I have argued in Chapter 6, cognition is not automatically equivalent to judgment; rather, it primarily refers to intuition, or the unified intuition, in contrast to the manifold intuitions. No matter what kind of representation is at issue, it must presuppose *the existence of the object* such that there is something to represent. According to Kant, it is the building one intuition that determines and gives an object in virtue of synthesizing manifold representations in the unity of self-consciousness.

(1) *To synthesize the manifold is to have an intuition.* Kant says explicitly: “as far as **the content is concerned**... [t]he synthesis of a manifold, however, (whether it be given empirically or *a priori*) first brings forth a cognition” (A77/B103). As I have suggested, cognition is primarily intuition. When Kant explains the genesis of cognition, at the same time he is explaining the genesis of object.

(2) *To have an intuition is to determine an object.* In the intuition of an object, we first individuate an object as a “this” and differentiate it from others. This individuation of object does not depend on concepts, and it could be accomplished by both the civil and the savage. Without intuition, both the singular use of concept and the singular judgment are impossible.

However, making a judgment presupposes the building of one intuition. Then, in what sense does judgment require intuition? I propose that an intuition is a *truth-maker* of a synthetic judgment and that a true synthetic empirical judgment is a *partial expression* of a relevant intuition. As I have indicated, both judgment and intuition are composite and structured whole-representation that consists of part-representations. A categorical judgment consists of two predicates. In other words, a minimal whole-representation consists of two part-representations. An intuition is infinitely divisible, therefore it consists of an infinity of part-representations. Intuition is a possible complete

representation that is fully determinate to designate an object. However, neither concept nor judgment by itself is a possible *complete* representation. Essentially, they are *partial* representation.

The truth of synthetic judgment requires that the world must be in some case to suffice to be a truth-maker. The two discursive marks as predicates in categorical judgment must be grounded in the relevant intuitive marks in intuition. Furthermore, these two part-representations should belong not to merely a *collection* of representations, but to one structured whole-representation, intuition or experience in their technical sense.

The idea of mereology is illustrated in Kant's Introduction to the *Critique*, and Kant makes a detailed analysis of the proposition 'A body is heavy' in the following paragraph:

On the contrary, although I do not at all include the predicate of weight in the concept of a body in general, the concept nevertheless designates an object of experience through a *part* of it, to which I can therefore add still other *parts of the same experience* as belonging with the former. I can first cognize the concept of body analytically through the marks of extension, of impenetrability, of shape, and so forth, which are all thought in this concept. But now I amplify my cognition and, looking back to the experience from which I had *extracted this concept of body*, I find that weight is also always connected with the previous *marks*, and I therefore add this synthetically as predicate to that concept. It is thus experience *on* which the possibility of the synthesis of the predicate of weight with the concept of body is *grounded*, since both concepts, though the one is not contained in the other, nevertheless belong together, though only contingently, as *parts of a whole*, namely experience, which is itself a synthetic combination of intuitions. (A7-8/B12)

From the passage, one could make the following observations. First, since experience is defined as "a synthetic combination of intuitions", experience is equivalent to the unity conception of intuition. Hence, experience is a whole-representation consisting of parts, that is, intuitive marks. On my reading, an object of experience is not literally an *object of experience* where experience is taken as equivalent to cognition, since here experience itself is the object. Rather, it is more plausible to read the object of experience as an *object in experience*. More precisely, it is a *part of experience* that extends in a particular span of time and includes the object.

Second, with reference to the generation of judgment, the minimal condition of this part of experience is that it must instantiate the subject concept and the predicate concept, that is, include the empirical intuitions of the two concepts in judgment. A concept could designate a part of experience as an object, in which this concept is instantiated and grounded by its relevant intuition, which functions as an intuitive mark of the whole intuition. This intuitive mark, however, does not exhaust a unified whole intuition. It must be combined with other intuitive marks to constitute the intuition as the whole-representation.

Third, *the experience is the ground of the synthesis of subject concept and predicate concept*. The predicate concept as a discursive mark is always connected with the subject concept as a discursive mark that contains many discursive marks under itself, whereby we think of the object of judgment.²⁷⁷ The combination of the predicate concept and the subject concept is grounded in their empirical intuitions, and these empirical intuitions as intuitive marks belong together with other intuitive marks to one and the same larger intuition as the whole-representation. In the following we will see, not only the concepts and their synthesis but also the determinate forms of the judgment are instantiated and grounded in intuition (or a particular part of experience). The Identity Thesis could be partly presented in the following table:

	Structured whole-representation	Part-representation (mark)
Partial representation	Judgment	Concept as discursive mark
(Possible) complete representation	Intuition	Intuition as intuitive mark

8.3.4 Category and Forms of Judgment: The Same Function Explained

(a) Categories and Forms of Judgment

Now let's turn to the issue concerning "the same function". Kant offers an explicit definition of the notion of function as "the unity of the action of ordering different representations under a common one" (A68/B39). First, the notion of function is defined in terms of the genus of *unity*. Second, the notion of function is broad, since the differentia "ordering different representations under a common one" in the definition are applied to both the logical unity and the transcendental unity.

As it is clarified by (I2), the first "unity" is the analytic unity of a judgment, while the second "unity" is the synthetic unity of an intuition. As Kant writes explicitly, the function that "gives unity to the mere synthesis of different representations **in an intuition**" is the category. However, Kant does not say explicitly what the function that "gives unity to the different representations **in a judgment**" is. Since "the representations in a judgment" are obviously concepts, and concepts are taken as the logical matter of judgment, it is not difficult to infer that what is in play is the logical

²⁷⁷ It is noteworthy that Kant's sliding from one level to another should not obscure the parallelism between two intuitive marks and discursive ones.

form of judgment, which is identified as the logical function. (A70/B95) The expression “the same function” seems to suggest that forms of judgment and categories are identical. How should we understand the nature of identity between forms of judgment and categories?

According to a naïve reading, the category and the form of judgment are numerically identical. However, Kant’s words here cannot be taken literally. In spite of Kant verbal insistence on the identity, the forms of judgment are apparently *conceptually distinct* from categories, and therefore they must be *numerically distinct* from each other. It comes as no surprise that the reading of the relationship between the category and the form of judgment is supposed to stand in line with the previous reading of separating building one intuition from making one judgment.

If the category and the form of judgment are not numerically identical, then a further question is what their relationship precisely is. Interestingly, in some other place Kant provides an alternative view of the relationship between the categories and the forms of judgment. In B159 Kant takes logical functions of judgment to be *coincident with* categories: “[i]n the **metaphysical deduction** the origin of the *a priori* categories in general was established through their complete coincidence (*Zusammentreffen*) with the universal logical functions of thinking” (B159). I think that the coincidence should be read not as the *identity* between two tables, but as their *correspondence*, or parallelism, which further implies that they are *numerically distinct*.

Then, what is precisely this coincidence relationship? In the Paralogism Chapter in the 1781 *Critique*, Kant offers a brief but illuminating review of the result of the Transcendental Logic:

We have shown in the analytical part of the Transcendental Logic that pure categories (and among them also the category of substance) have in themselves no objective significance at all unless an intuition is subsumed under them, to the manifold of which they can be applied as functions of synthetic unity. Without that they are merely functions of a judgment without content. (A348-A349)

Here Kant is discussing the relationship between the forms of judgment as the functions of judgment and the categories as the functions of synthetic unity. While Kant does not make it explicit, it is very plausible to take “functions of judgment” to be *logical functions*. In the *Critique* Kant never attributes any function other than the logical ones to judgments. In a number of texts Kant holds that what pertains to objects or things is real (metaphysical), whereas what pertains to

judgment is logical.²⁷⁸ In the 1781 *Critique*, by the logical functions of judgment Kant always refers to the forms of judgment.

As this passage shows, categories are not numerically identified with the logical forms of judgment. What Kant is suggesting seems to be that categories have a *twofold mode of the existence of the same thing*. When intuitions are subsumed under categories, categories are “functions of synthetic unity”. When intuitions are not subsumed under categories, categories are logical functions of judgment, i.e., *functions of analytic unity*.²⁷⁹ Take H₂O for example. H₂O is water when the temperature is above zero, whereas H₂O is ice when the temperature is below zero. No matter it is solid or liquid, it remains identical as H₂O throughout the change of temperature. Far from being identical, categories as logical functions and categories as functions of synthetic unity are numerically distinct from each other. What Kant further implies is that the twofold mode of existence of categories seems to exclude the other.

The identity thesis naturally invites the further question about whether categories precede the forms of judgment or the other way around. In my view, the answer is similar to the counterpart question in (iii): it is the operation of categories that is presupposed by the operation of forms of judgment. Yet, the issue is somehow more complex here. I would like to propose a dual relationship between categories and forms of judgment by distinguishing two distinct levels: on the one hand, the form of judgment is epistemologically prior to the category, and, on the other hand, the category is metaphysically prior to the form of judgment.²⁸⁰

In his formulation of identity thesis, Kant uses the forms of judgment to introduce categories, not the other way around. The assumption behind this is that the logical forms of judgment are *better known* than categories. Remember that the original title of the so-called Metaphysical Deduction is “On the Clue to the Discovery of all Pure Concepts of the Understanding”. The clue by means of which pure concepts of understandings are determined is nothing but the logical forms of judgment. The theory of logical forms of judgment is familiar to Kant’s contemporaries. Kant’s contribution is not to propose, for the first time, that there exist forms of judgment, but to bring

²⁷⁸ For Kant’s distinction between the real and the logical see also R2994 (AA 16:606), R3716 (AA 17:259), R3747 (AA 17:281), and R3814 (AA 17:302).

²⁷⁹ For Kant the logical and the analytic are coextensive in most contexts.

²⁸⁰ For a metaphysical priority reading see Longuenesse (1998, 201). Longuenesse holds that (T2) expresses an asymmetrical relation, and she believes that the generation of the category as the discursive representation presupposes the striving of making judgment.

the forms of judgment into completeness.²⁸¹ In fact, this doctrine is a part not of his revolutionary transcendental philosophy, but of his logic.²⁸²

From the fact that the logical form of judgment is *epistemologically prior* to the category, however, it does not follow that the former is also *metaphysically prior* to the latter. Rather, in the *metaphysical* sense the application of categories is presupposed by the determinate employment of forms of judgment.

According to my previous interpretation, a judgment is grounded in an intuition. Now it could be extended as the following chain of presupposition. The category is presupposed by the empirical intuition; the empirical intuition is presupposed by the empirical concept, the empirical concepts is presupposed by the forms of judgment.

(b) The Multiple Theoretical Roles of Categories

Initially, it seems that the question (iv) is easier to handle, since it could be illuminated by the answer to the parallel question (iii). It turns out that the situation in “the same function” is more complex than that in “the same action”. The above account is not the end of question of “the same function”, because the issue is complicated by a relative clause included in the sentence (T1). By introducing this clause, Kant draws a further distinction between two different senses of categories: category as analytic unity and category as synthetic unity. Therefore, what the “the same function” in (T1) introduces is not a *dyad* relation, but a *triad* relation.

According to my interpretation, in sentence (T1) the second “which” refers to the second and the proximate “unity” rather than to “synthesis” or to “function”. If the “which” refers to “synthesis”, then it would be incompatible with the fact that the “merely synthesis” includes no unity. If the “which” refers to “function”, then it would be too general to be differentiated from the first “unity”. This is the basis of all the following analysis.

When Kant introduces the category in the name of “the pure concept of understanding”, Kant does not say that the unity *is* “the pure concept of understanding”, but that the unity, “*expressed generally*, is called the pure concept of understanding”. I contend that the expression “generally expressed” is by no means a loose locution; rather, it means something very *specific*: it is the abbreviated form for “*expressed by general representation*”. This way of expression is nothing other than representation, and the general expression is nothing but concept. Accordingly, it means that the

²⁸¹ For further reading see Reich 1994.

²⁸² The doctrine is explicated in various transcripts of his lecture on logic. See *Logic* (AA 9:102)

unity *in the form of general representation* is the pure concept of understanding. In addition, it implies that the synthetic unity in intuition *in itself* is not a general representation, but a *singular* one. Combined together, what Kant says is that if the unity of intuition takes *the discursive expression of concept*, then it is identical with the pure concept of understanding as the analytic unity. Category and synthetic unity of intuition stand in a semantic relation: a category is the concept of the unity of intuition, and the unity of intuition is the extension of a category. Here the pure concept of understanding is taken in a strict sense that it is the general and clear representation. Generality and clarity are the two basic conditions for it to be explicitly used in making judgment. This is consistent with what Kant writes previously in §10:

Now **pure synthesis, generally represented**, yields the pure concept of the understanding. By this synthesis, however, I understand that which rests on a ground of synthetic unity *a priori*; thus our counting (as is especially noticeable in the case of larger numbers) is **a synthesis in accordance with concepts**. (A78/B104)

Again, “generally represented” should be taken as referring to the *general representation* of something. Kant affirms that the *general representation* of pure synthesis is the category. In other words, pure synthesis is the *singular representation* of category, or it is the *sensible instantiation* of the category as general and clear representation. While it is unobjectionable to say that a concept is a general representation of a singular intuition, and an intuition is a singular representation of a concept, in any case they are not generatively symmetrical. By claiming that pure synthesis yields the pure concept, Kant further implies the *generative priority* of synthesis as singular representation to the categories as general representation, which is consistent with Kant’s more general view of the priority of intuition to concept. Note that the second sentence in this quotation does not mean that the pure synthesis *presupposes* a further condition of synthetic unity *a priori*; rather, it means that pure synthesis *includes* a synthetic unity *a priori*. Otherwise, it would be inconsistent with the previous text.²⁸³

The above analysis is primarily based on Kant’s 1781 *Critique*. In the 1787 *Critique*, Kant ascribes to the category a new theoretical role of determining the concepts in judgment. It has been shown that the logical forms are essential to judgment in general. Kant’s new contention is that the concepts standing in the forms of judgment are further *determined* by categories, which could be viewed as higher-order concepts.

²⁸³ For the ambiguity of synthesis see §10 and §15 in the 1787 *Critique*.

In explaining the idea of determining concepts in judgment, Kant writes in his “**explanation of the categories**” in the B-Deduction: “[t]hrough the category of substance, however, if I bring the concept of a body under it, it is determined that its empirical intuition in experience must always be considered as subject, never as mere predicate; and likewise with all the other categories.”(B129) When I bring the concept of body under the category of substance, I am *not* bringing a lower concept under a higher one in virtue of logical subordination.²⁸⁴ If it were the case, it would still pertain to the *logical use* of understanding.

Therefore, the category plays a twofold role in determining representation. On the one hand, it determines the position of the empirical intuition in one intuition (experience). On the other hand, it determines the position of the empirical concept in one empirical judgment. The former could be called the logical determination, since it concerns the concepts in judgment on the logical level, while the latter could be called the real determination, since it concerns the determination of the empirical intuition in experience.

If the concept of body is brought under the category of substance, it does not make possible the determination of its empirical intuition of the concept of body. Rather, the subsumption of the concept of body is only a symptom. It *presupposes* that the determination of the empirical intuition of the concept, rather than the concept of the empirical intuition. Therefore, it is the real determination of an empirical intuition as a part in one empirical intuition (experience) as a whole that grounds the logical determination of its empirical concept as a part in one empirical judgment as a whole.

This theoretical role of categories is tricky. On the one hand, the determining function of categories is not reducible to the *logical use* of understanding. On the other hand, the determination of forms of judgment by categories nonetheless counts as the *logical determination*, which should be distinguished from the real determination of intuitions.

Therefore, it must be admitted that Kant’s conception of categories is complex and controversial. Kant seems to assign a variety of theoretical roles to categories. In the 1781 *Critique*, categories play the following theoretical roles: (a) the logical function of judgment, (b) concept of object in general (the transcendental significance of categories), (c) the function of synthetic unity, namely, the schematized categories (the empirical significance), and (d) the formal unity of the synthesis of transcendental imagination. What makes things more complex is the fact that Kant’s construal of categories evolves between the two editions of the *Critique*. In the 1787 *Critique*, Kant

²⁸⁴ See Kant’s *Logic* (AA 9:96-97) for logical subordination. See also Chapter 9.

assigns a new role to categories: (e) the determining function of the logical function of judgment. Therefore, we must be very cautious about what Kant has in mind when he speaks of categories.

8.4 The Argument by Judgment

In the following I will consider two species of argument with reference to judgment: the argument *by* judgment, and the argument *from* judgment. The former species is the argument developed with reference to the original context of the *Critique*, while the latter one is the argument developed independently of the context by exploiting the theoretical potential of judgment.

Kant's original intention is to make judgment-introducing a step within the B-Deduction to form one single large argument. In effect, this argument is virtually a revised version of the argument from above with reference to judgment. Since the B-Deduction starts with the premise of the identity of self-consciousness, this species of argument typically takes the form of the argument *by* judgment, which means that judgment is *not* employed as a premise. It must be cautioned that this version of argument does not reflect the way in which the judgment plays its role in the argument in Deduction.²⁸⁵ Remember that the structure of the argument from above is as follows:

(AA1) The manifold of intuition stands under the synthetic unity of self-consciousness.

(AA2) The synthetic unity of manifold in an intuition implies synthesis.

(AA3) Synthesis implies *a priori* rules.

(AA4) *A priori* rules are identical with categories.

(AA5) The synthetic unity of manifold in an intuition implies categories.

The crucial step is to introduce judgment as a *justificatory* move to link synthesis and categories. In one most straightforward way, the original argument from above could be extended into the following one:

²⁸⁵ Van Cleve makes attempt to explore this possible line of argument and criticize it. See van Cleve 1999, 87-90.

(AbJ1) The manifold of intuition stands under the synthetic unity of self-consciousness.

(AbJ2) The synthetic unity of manifold in an intuition implies the synthesis.

(AbJ3) The synthesis implies judgment.

(AbJ4) The judgment implies category.

(AbJ5) The synthetic unity of manifold in an intuition implies category.

According to this argument, the premises (AbJ3) and (AbJ4) judgment play the role of linking synthesis and categories. Unfortunately, this straightforwardly revised argument suffers from serious objections in both of the introduced premises. Now I will put aside the objection to the claim (AbJ4) that the judgment implies the category, and concentrate on the claim (AbJ3) that synthesis implies the judgment. The principal objection to (AbJ3) is that it presupposes a conception of judgment that is *too weak* to be acceptable. One might wonder why judgment as a discursive action of understanding is so cheap that every synthesis could imply it. In fact, there are abundant texts to show that for Kant we could synthesize intuitions without presupposing synthesizing concepts, i.e., making a judgment. In other words, not all cognitions take the form of judgment.

Another version of the argument by judgment does appear in the text. The highly compressed §20 in the B-Deduction is a summary section of the previous sections from §15 to §19. In §20 Kant sketches a line of the argument by judgment, which could be formulated as follows:

(AbJT1) The manifold of intuition stands under the synthetic unity of self-consciousness.

(AbJT2) The manifold of intuition is **determined** by the logical functions of judgments. (by definition in §19)

(AbJT3) The logical functions of judgments are categories.

(AbJT4) The manifold of intuition is determined by categories.²⁸⁶

²⁸⁶ The §20 of the 1787 *Critique* reads as follows: “The manifold that is given in a sensible intuition necessarily belongs under the original synthetic unity of apperception, since through this alone is the **unity** of the intuition possible (§17) That action of the understanding, however, through which the manifold of given representations (whether they be intuitions or concepts) is brought under an apperception in general, is the logical function of judgments (§19) Therefore all manifold, insofar as it is given in **one** empirical intuition, is **determined** in regard to one of the logical functions for judgment, by means of which, namely, it is brought to a consciousness in general.

This argument is identical with the previous enlarged argument from above in the premise (AbJT1) and the conclusion (AbJT4), and therefore it is also an argument by judgment. However, (AbJT2) and (AbJT3) indicate that judgment plays a quite different role in this version of the argument by judgment. Here judgment does not *link* the inference from synthesis to categories; rather, it *replaces* the role of synthesis. This move suggests that in this argument judgment is identified with synthesis in question.²⁸⁷

The supplement of synthesis with judgment is not unfounded. Many textual confirmations for the identity of synthesis and judgment could be gleaned. First, both judgment and synthesis are *functionally similar*. On the one hand, Kant gives such characterization of combination: “**Combination**... is rather only an operation of the understanding, which is itself nothing further than the faculty of combining *a priori* and bringing the manifold of given representations under unity of apperception.” (B134/B135) On the other hand, the characterization of judgment is likewise characterized: “[t]hat action of the understanding, however, through which the manifold of given representations (whether they be intuitions or concepts) is brought under an apperception in general, is the logical function of **judgments**.” (B143) Obviously, since both are characterized as essentially *combining the manifold into one self-consciousness*, it is tempting to identify one with the other. Moreover, judgment and synthesis are interchangeably used. For instance, Kant explicitly writes: “They [Categories] are only rules for an understanding whose entire capacity consists in **thinking**, i.e., in the action of bringing **the synthesis** of the manifold that is given to it in intuition from elsewhere to the unity of apperception” (B145). Some commentator believes that in §26 Kant makes it clear that judgment is the intellectualized form of synthesis.

In (AbJT2) and (AbJT3) Kant makes two bold contentions respectively that the logical function of judgment *determines* the manifold given in an intuition by bringing them under the synthetic unity of apperception, and that the logical functions of judgment are *identified* with categories. With the introduction of (AbJT2) and (AbJT3), however, Kant’s official formulation of the argument by judgment in §20 becomes mysterious, if not disastrous, for both (AbJT2) and (AbJT3) seem wildly implausible.²⁸⁸ The objection to the contention (AbJT2) is that the conception

But now the **categories** are nothing other than these very functions for judging, insofar as the manifold of a given intuition is determined with regard to them (§13). Thus the manifold in a given intuition also necessarily stands under categories.” (B143)

²⁸⁷ It cannot be synthesis in general, but one species of synthesis. For Kant’s discussion of synthesis in general see §10, and for Kant’s discussion of the variety of synthesis see §15.

²⁸⁸ The claim that judgment makes possible the synthetic unity of the manifold of intuition is surprising. It amounts to claiming that judgment makes object possible.

of judgment operative in the premise is *too strong* to be intuitive.²⁸⁹ Here the notion of “determine” should be understood as metaphysical determination. Then, what is an intuitive definition of judgment? As I understand it, an intuitive definition of judgment is to capture the idea that to make a judgment is to combine or manipulate *concepts* which obviously falls short of *causal efficacy*. Kant’s logical definition of judgment perfectly satisfies this criterion. In contemporary jargon, to make a judgment is akin to *entertain* a belief, or to make *assent* to a belief.

One of our most basic philosophical intuitions is that *the world is doxa-independent*. In other words, the world is simply not influenced by our merely *entertaining* one or another doxastic propositional attitude.²⁹⁰ This intuition stands independently of whether the world is interpreted by realistic or idealistic theory. Although this intuition appears to be congenial to realists, it is certainly also true of idealists who hold that the world is dependent on mind. Note that the idea of mind-dependence takes the form of perception-dependence, instead of doxa-dependence.²⁹¹ It is also true even of Kant, to whom certain kind of *conceptual idealism* is occasionally attributed.²⁹² Even Kant is a conceptual idealist, he would certainly reject the widely implausible view that categories as general and reflected concepts consisting in the analytic unity of consciousness are *constitutive of* reality. Concepts *per se*, no matter empirical or pure, are not and cannot be the condition of experience. To be sure, categories structure the world, but they do so not as categories *per se*, but as schemata, i.e., the quasi-perceptual entities.²⁹³ Therefore, we are confronting a dilemma that the definition of judgment is *either too strong or too weak* for the argument by judgment. As a linker, the judgment either implies the synthesis, or is implied by the synthesis. In the former case the conception of judgment is too weak, whereas in the latter case the conception of judgment is too strong.

One could circumvent this objection by insisting this is not what Kant literally says. What Kant says is that the manifold of intuitions is determined by *logical functions* of judgment, rather than by *judgment itself*. However, the proposal that *logical functions* of judgment determine the intuitions is even more unintelligible. Then one might reasonably ask how it is possible for those logical functions of judgment to determine the manifold of intuition in some way without first

²⁸⁹ For a similar view see Van Cleve 1999, 87.

²⁹⁰ Here we are not concerned with the justification or the ground of the *content* of the propositional attitude.

²⁹¹ Many celebrated idealists do hold that the world is concept or idea-dependent. But they are adherent to a radically different version of idealism: objective idealism or absolute idealism. For one thing, for these idealists concepts are Ideas or objective being of a distinctive Platonic origin. Most importantly, their idealism is *teleological* idealism, and the dependence in question must be understood teleologically, which is obviously different from the notion the dependence in question. For absolute idealism and its reaction to subjective idealism see Beiser 2009.

²⁹² In my view, at least the metaphysical version of conceptual idealism should not be attributed to Kant, even though some epistemic version of conceptual idealism makes sense.

²⁹³ The extraction of clear concept from obscure rules in experience or conditions of experience will be discussed later in this chapter.

presupposing that judgment has already been at play. If making a judgment presupposes the working of logical functions, then at least Kant owes us an account of how the working of logical functions determines the manifold of intuitions. Then, the same old problem emerges in a new guise; Kant is guilty of identifying logical functions of judgment with rules of synthesis without justifying it. Furthermore, as I have mentioned earlier, Kant explicitly says that “merely functions of judgment” are “without content”, i.e., that they are *empty*. (A349) It leaves unexplainable how the empty forms of judgment can add determinations to the object.

The objection to Kant’s contention (AbJT3) is that, as I have argued, the forms of judgment and categories are not identical. The form of judgment is the function that gives unity to many representations in a judgment, while the category is the function that gives unity to many representations in an intuition. Both of the forms of judgment and categories fall under the category of the function of understanding. The judgment and the intuition are the contexts to which they are applied, and the context is precisely the very thing that differentiates their identity. Therefore, they cannot exchange their functions, not to mention identify their functions.

In fact, both (AbJT2) and (AbJT3) are even not consistent with what Kant says in some other place. Let us further consider a passage equally added to the 1787 *Critique*:

They [(categories)] are concepts of an object in general, by means of which its intuition is regarded as **determined** with regard to one of the **logical functions** for judgments. (B128)

Note that Kant’s formulation is very careful here: the intuition of an object in general is determined by means of categories with regard to logical functions of judgments. At least, three points are included in this compressed sentence. First, it is *intuitions*, rather than *concepts*, or anything else, that are determined. Second, the ground of the determination is *categories*, rather than logical functions of judgment. Third, the content of the determination must be specified with reference to the content of the *logical functions of judgment*. The second claim that intuitions are determined by *categories* is inconsistent with the premise (AbJT2) that intuitions are determined by *logical functions*. Consequently, it implies that categories are not numerically identical with the forms of judgment since they do not share at least one property. It is surprising that both texts added in 1787 are flatly inconsistent with each other. I am convinced that the former formulation is too hasty, and the latter formulation is Kant’s considered view.²⁹⁴

²⁹⁴ I will delay the relevant discussion for a while.

8.5 The Argument from True Judgment

The rejection of the argument by judgment does not mean that any attempt to invoke judgment in the Transcendental Deduction is hopeless. In spite of Kant's intention to form a large argument by taking into account the theoretical potential of judgment, we could formulate an independent argument *premised upon* the notion of judgment that bypasses the notion of identity of self-consciousness. This move of liberating judgment from the premise of the identity of self-consciousness could be justified by the fact that Kant is implicitly employing two different conceptions of self-consciousness or apperception in the B-Deduction.

The basic idea in §16 is that the *numerical identity* of self-consciousness is possible only under the condition of the combination which could bring all the manifold representations into self-consciousness. In Kant's words, the analytical unity of self-consciousness presupposes its synthetic unity. The basic idea in §19 and §20 is that judgment could bring the manifold under apperception. Kant does not ground the objective validity with reference to the identity. Rather, Kant brings into view the *objective validity* that is vindicated by the logical function of judgment. In short, two discourses presuppose two lines of argument. One line of argument is from the fact of the identity of apperception to synthesis, while the other line is from the definition or the object-claim of judgment to its achievement in objective validity.²⁹⁵ Therefore, the two lines of argument from synthesis and the argument from judgment rest on these two different conceptions.²⁹⁶

The liberation of the judgment from the numerical identity of self-consciousness comes at the price of losing the theoretical advantage of introducing the identity of self-consciousness, namely, to refute skepticism. For instance, Guyer argues that Kant's commitment to judgment amounts to the *knowledge of object*, which is precisely what Kant intends to argue for. Therefore, Guyer concludes that the argument from judgment simply begs the question of skepticism.²⁹⁷ However, I believe that the weight of the anti-skepticism in the Transcendental Deduction is overrated. If there is any kind of skeptics who casts into question the logical operation of *judgment* and the semantic property of *truth*, he would be the last kind of skeptics Kant would argue with. If we do not take Kant's arguments to be primarily anti-skeptical, this kind of charge soon disappears.

²⁹⁵ See also Guyer 1987, 73-86, and Henrich 1994, 155-164. Guyer traces this to Kant's alleged commitment to two different conceptions of apperception, and he argues that in the course of argument Kant simply conflates *self-consciousness* with *object-consciousness*, or even with *knowledge of object*. Henrich believes that the identity of self-consciousness could make up for the inner deficiency of the objectivity of judgment to form a successful argument.

²⁹⁶ The problem is different from that of the relationship between the argument from above and the argument from below, where it is quite easy to sort out two arguments.

²⁹⁷ See Guyer 1987, 91-92.

As I have proposed, Kant's argument is explanatory in nature, and accordingly Kant must be committed to a set of assumptions. It is quite plausible to assume that we have the synthetic judgments of experience, that these judgments are truth-apt, and that in most cases we can tell true judgments from false ones. Furthermore, when we think of the fact that Kant acknowledges the actuality of science as synthetic *a priori* judgments, then the acknowledgment of the actuality of science as empirical synthetic judgment becomes much less alarming.

Guyer reconstructs one version of argument based on the Metaphysical Deduction.²⁹⁸ The argument runs as follows:

(G1) We have some cognition of objects.

(G2) Cognition always takes the form of true judgments.

(G3) Judgments can only be made in a fixed variety of logical forms.

(G4) Judgments with such structures can only be made about objects if the concepts of objects are themselves structured in certain ways.

(G5) The general ways in which the particular concepts of objects must be structured if those objects are to be the objects of judgments are nothing other than the "pure concepts of the understanding" or the categories.

(G6) Categories have some actual application to objects of cognition.

Guyer believes that the conclusion is "not something that should be very difficult to prove" (2010, 121). This line of argument takes a straightforward route to the conclusion, and it is clear and powerful. Premise (G1) is obviously a fact Kant assumes from the very start, which we have discussed in Chapter 6. It is important to note that true synthetic judgment is the premise, rather than inferred in the argument. This new start attributes no particular anti-skeptical intention to Kant.

In (G2) Guyer seems to assume cognition to be equivalent to propositional knowledge. Given that, the argument from judgment is virtually an argument from true judgment. Since Kant's

²⁹⁸ Guyer reconstructs many versions of argument with reference to judgment, which are based on Kant's different texts. Most of these arguments could be found in Guyer 1987, 94-102. For Guyer's final versions of the argument with reference to the Metaphysical Deduction see Guyer 2006, 78-80, and Guyer 2010, 120-122. The above reconstruction is primarily based on Guyer 2006 and Guyer 2010.

conception of cognition radically differs from propositional knowledge or any belief-like entities, the assumption is arguably false.²⁹⁹ Nevertheless, propositional knowledge can be regarded as a species of cognition, and therefore (2) does not affect the general point made in the argument, and at least a restricted conclusion can be drawn.

(G3) is based on Kant's hylomorphic analysis of judgments in terms of matter and form. Kant maintains that his table of judgments exhausts all the forms of judgments. (4) is the most burdened premise centered on Kant's key idea of the determination of the forms of a judgment in §14, which is developed between the two editions of the *Critique*. In (G4) and (G5) Guyer assumes that the forms of judgment make the demand that *the concepts of objects must be structured*. One plausible interpretation is that what Guyer means is that the objects, or the intuition, must be structured. The reason why it is called concepts of objects is nothing other than that the reference to the objects of intuition implies that it *includes a concept*, which is consistent with the similar usage in §17, where Kant says that in the *concept of an object* the manifold of intuition is united. In this light, categories are nothing other than the various specific *forms of the concept of an object*.

If this version of the argument from judgment were adequate for the argumentative objective, then it would make the entire Transcendental Deduction superfluous. The conclusion (G6) shows it is not. According to Guyer, there are two differences between the conclusion of the Metaphysical Deduction and that of the Transcendental Deduction. First, the Metaphysical Deduction shows that categories have application to *some* objects, whereas the Transcendental Deduction proves that categories apply to *all* objects. Second, the Metaphysical Deduction can only prove that categories have the *actual* application, whereas the Transcendental Deduction proves that categories have *necessary* application. The actuality of application seems to be derived from the premise that we have cognition of objects. Since this premise is a contingent truth, the conclusion should also be a contingent truth provided that the argument is valid. At best, we can prove that categories are *necessary for* the cognition of objects, but from this it does not follow that the application of categories is necessary. In a nutshell, the conclusion is restricted in both its scope and its modal strength: categories have objective reality to some objects of experience and in an actual way.³⁰⁰

Guyer's evaluations of the argument from judgment are interesting. The evaluations seem to undergo a substantial change. In Guyer 1887 the assessment is certainly negative, where categories are viewed as extra-logical constraints. Contrary to his early harsh criticisms on this line of thought,

²⁹⁹ In many places, however, Kant argues that cognition consists of judgment. This kind identification is particularly conspicuous in his attempts to explore the potential of judgment to complete deduction of categories after the 1781 *Critique*.

³⁰⁰ Guyer 2010, 120-122.

more recently in Guyer (2008) and (2010) the assessments are positive. Guyer is convinced that the way Kant argues is broadly satisfactory, at least compared to the other lines of argument to which Guyer mounts harsh criticisms. Guyer believes that the argument from true judgment does achieve something substantial. While the Transcendental Deduction aims to prove that categories *necessarily* apply to *any and all* experience that we might have, the Metaphysical Deduction does make progress by showing that categories have *some actual* application to objects of cognition. Therefore, the difference between the aim of the Metaphysical Deduction and that of the Transcendental Deduction is merely a matter of degree.

In effect, Guyer levels two criticisms to the argument from judgment *itself* by drawing on the resources of the Metaphysical Deduction. On the one hand, its conclusion is too weak, since it cannot prove that *all* categories must be objectively real, therefore it does not live up to Kant's expectation; on the other hand, its premise is too *strong*, since it assumes the knowledge of object, therefore it cannot refute the *Humean* variant of skepticism.

I do not think that Guyer's criticisms are tenable. In the following I will first briefly comment on the first objection and then focus on the second one. The first objection to the weakness of the conclusion is misleading. In order for *all* categories to be related to objects of experience, Kant must subscribe to the assumption that there is at least one true judgment in its species of different logical forms. This assumption is not controversial. Guyer holds that the argument from true judgment is limited in result. As we will see later, the real question that plagues this version of argument is that it does not achieve any result at all.

As for the second objection, I think that it is not obligatory to have an anti-skeptical reading of the Transcendental Deduction. Before I develop my criticism I would like to have a survey to help the readers to understand Guyer's motivation and its relation to skepticism. Guyer's generosity to and confidence on the plausibility of the argument from true judgment seem to be motivated by his broader consideration of the structure of *Analytic*. We might call this "the problem of the structure". Guyer warns us that this problem of the structure should be distinguished from the old one. The former is concerned with the structure of *Analytic*, whereas the latter is confined to the structure of the Transcendental Deduction. In addition to the official division of the structure within the Transcendental Deduction, one could unify the Metaphysical Deduction and the Transcendental Deduction from a higher standpoint such that one could make sense the inner connection between the Metaphysical Deduction and the Transcendental Deduction.

This perspective has an interpretative bonus: it enables us to be in a better position to see the nature of the argument in the Transcendental Deduction. The positive assessment of the argument

from judgment encourages an anti-skeptical reading. The partial success of the Metaphysical Deduction leaves unmotivated the regressive reading of the master argument in the Transcendental Deduction, namely, the argument from self-consciousness. As Guyer observes, if the Metaphysical Deduction establishes that categories apply to the objects of cognition, then it has already contained a regressive argument by analysis of *the necessary conditions* of cognition of objects in the form of judgment. Provided the argument from self-consciousness in the Transcendental Deduction is also a regressive one, as Ameriks has suggested, then it seems to be rendered redundant by the Metaphysical Deduction. Therefore, it is profitable, though not obligatory, to read the argument from self-consciousness as a progressive argument against Humean skepticism.

Along this line of reading, Guyer obviously assumes (1) that the Metaphysical Deduction accomplishes the argumentative objective to some extent. And Guyer further unobjectionably assumes (2) that the Metaphysical Deduction and the Transcendental Deduction should be assigned with different tasks, and (3) that the Transcendental Deduction should be not trivial, and it must prove more than the Metaphysical Deduction, though the former does not necessarily presuppose the latter. Then, quite reasonably, Guyer concludes that the Transcendental Deduction is supposed to be anti-skeptical. This reading, if correct, constitutes an initial argument for the anti-skeptic motivation of the master argument in the Transcendental Deduction.

As I have argued in Chapter 7, Kant's premise is not Cartesian, nor is his conclusion anti-Humean. This broader view of the structure of the Metaphysical Deduction and the Transcendental Deduction is not an argument *for* anti-skepticism reading, rather it is an argument *from* it. This reading is a result of the move of first assuming that the Transcendental Deduction is anti-skeptical. Furthermore, the argument is not far from conclusive. To subscribe to the anti-skepticism reading is not the only way out of danger of redundancy of the Transcendental Deduction. One could happily grant that the result of the argument from judgment is limited, yet only limited in the sense it falls short of meeting the argumentative objective of the Transcendental Deduction, and meanwhile not to attribute to the Transcendental Deduction an anti-skeptical task.

8.6 The Objection from False Judgment

In his analysis of the Transcendental Deduction in the 1787 *Critique*, Van Cleve mounts "the really fundamental criticism" to judgment part in the B-Deduction and he believes that it "has not received the attention it deserves" (1997, 89). I think that Van Cleve's evaluation here is fair and his insight is of great value. Due to its importance, I will quote this criticism at full length:

Even if Kant could show that some of his categories must be employed in any judgment we make (and that all of them must be employed on some occasion or other), this would not be enough for his purposes. For that result in conjunction with the rest of the Transcendental Deduction would yield no conclusion stronger than this: all my representations are connected in judgments that use Kant's categories. But Kant wants to show that the categories are *objectively valid*—that they actually apply to objects of experience. To reach this conclusion he needs the further premise that any categories used in judging are *actually exemplified* by the items judged about. But we have only to state this premise to see how implausible it is. If I judge that the shining of the sun has caused the warming of the stone, there is no guarantee that the category of cause applies to the events connected in my judgment—for *my judgment may not be true*. (1997, 89)

In this passage, it is not immediately clear what precisely Van Cleve's objection is, for he seems to raise a number of different objections to the conclusion of Kant's argument for its falling short of the objective of Deduction. Some commentators believe Van Cleve's objection is that Kant's conclusion falls short of the required necessity.³⁰¹ According to this objection, Kant simply conflates *necessary condition for instantiation* with *necessary instantiation*. The argument at best shows that the employment of categories in judgments is *necessary for the objective reality* of categories, but it does not follow that categories are *necessarily objectively valid*. For instance, Gomes writes: “[y]et Van Cleve's objection to this argument holds good: the most that follows from this argument is that in unifying the manifold I must apply the categories – something which is compatible with the claim that the categories do not apply to the objects of experience. Failure to show that the categories must apply is a failure to show that they are objectively valid.”³⁰²

If this reading is correct, then Van Cleve's verdict of Kant's argumentative inadequacy seems to be too hasty, and even arbitrary. Exegetically, one easy way to handle this objection is to take into consideration Kant's own distinctive design of the structure of the B-Deduction. Van Cleve's objection results from the fact that he simply overlooks the proof-structure peculiar to the B-Deduction. It is noteworthy that Van Cleve's reconstruction is based on Kant's first part of the B-Deduction without taking the second part of the B-Deduction into consideration. Given this obvious limitation, commentators who are sympathetic to Kant's arguments would feel happy to recognize the fundamental limitation of the conclusion in §20. As Allison makes clear in his explanation of the official structure of the B-Deduction: “Although this might be thought sufficient for Kant's purposes, we shall see that it is not. The essential point, which necessitates a second part, is that the Deduction aims to show that the categories are conditions of experience, which

³⁰¹ Gomes, 2010; Schulting, 2017.

³⁰² See Gomes 2010, 129.

requires more than discursive thought.”³⁰³ In the first part, Kant only shows that categories are only valid of objects of thoughts or judgments. In Allison’s words, the specter is left untouched in the first part. It is only in the second part that Kant proves that categories are applied to objects of experience. The second part of the B-Deduction definitely lives up to Van Cleve’s expectation.³⁰⁴ The consideration of the proof-structure is important, yet I will delay the relevant discussion to the next chapter.³⁰⁵

This reading of Van Cleve’s objection is mistaken, however. On my reading, Van Cleve’s objection is rather that Kant’s conclusion falls short of genuine *objectivity*: even though categories are *employed* in judgment, it does not suffice to imply that categories are *instantiated* in experience. Van Cleve later hints that this mistake might arise out of the overlook of the distinction between ‘we must apply categories’ to ‘categories must apply’.³⁰⁶ Initially, this distinction seems to be targeted at the Kant’s conflation of pragmatic level of *concept use* and semantic level of *concept subsumption*. It soon becomes clear that Van Cleve’s diagnosis is that Kant conflates the semantic level where categories are employed *as concepts* in judgment with the metaphysical level where categories are instantiated *as properties* in objects in experience.

Van Cleve acutely notes that there is a gap in the inference from the employment of categories in judgment and the instantiation of categories in things. In order to close the gap between two levels, Kant must implicitly assume an additional premise, according to which categories employed in judgment must be instantiated in things. However, this required premise is widely implausible, for obviously categories in false judgment could not possibly be instantiated in objects. Van Cleve’s diagnosis is important, for he detects an assumption any version of argument from judgment must embrace.

Van Cleve’s precise point of rejecting the inference is interesting. Van Cleve’s objection is that *in the case of false judgment* we are not justified to make the inference from (1) to (2). Van Cleve

³⁰³ See Allison 2015, 329.

³⁰⁴ Gomes believes that the A-Deduction suffers from the objection that Van Cleve mounts. This assessment is curious. Van Cleve’s reconstruction obviously rests on the first part of the B-Deduction. The problem is that Van Cleve ignores the second part of the B-Deduction, as Gomes has correctly pointed out. It is more plausible to say that the first part of the B-Deduction is vulnerable to this objection. Gomes suggests that “the A deduction is structurally equivalent to the argument of §§15–19 of the B-Deduction” (2010, 133). It is true that the first step of the B-Deduction is modeled on, or originated from the argument from above. However, it is difficult to find counterpart in the first step the argument from below in the A-Deduction.

³⁰⁵ If this reading is correct, then it seems the next step is to inquire into whether there is some promising line of thought *within* Kant’s theory of judgment that can make Kant immune from the charge of inferential gap.

³⁰⁶ Van Cleve writes as follows: “I fear that some may have overlooked this obvious point because of the easy verbal slide from ‘we must apply categories’ to ‘categories must apply’. One may slip without noticing it from one to the other, but between the two there is no small distance. It is the distance between our using a category and its being instantiated, or between our making a judgment and its being true.” (1999, 89)

does *not* hold that *in any case* the inference cannot go through from the logical level of judgment to the metaphysical level of objects; rather, he believes this kind of inference works, but it works only for true judgment.

In other words, Van Cleve commits himself to the assumption that only true synthetic judgments entail the instantiation of the categories in objects. It is not only *false* but also *impossible* for the employment of categories in false judgments to entail the exemplification of categories in objects. In effect, the required additional premise is not discarded, but modified. This modified result is nothing other than the Instantiation Principle that links *true predication* with *instantiation*, according to which the employment of concepts in *true* judgment entails their instantiation in objects.

Facing Van Cleve's charge, we are bogged into a dilemma for the scope of Instantiation Principle: (i) either only true judgment can entail the instantiation of categories; (ii) or else even false judgment could entail instantiation of categories. This dilemma concerns whether the employment of categories in false judgments entails their instantiation in objects. Before addressing the dilemma, we should ask the logically prior question of whether categories are employed in false judgment. Now it is widely accepted that the employment of categories in judgment does not entail the truth of judgment. Rather, the employment of categories in judgment is merely making judgment *truth-capable*.³⁰⁷ Since categories make judgment truth-capable, it implies that categories are equally employed in false judgment. In my view, another reason to endorse such a view is that it is appealing to our intuition. When we are making judgments, we are making judgments without determining or knowing their truth-values. The fact is that categories as concepts are employed in false judgment just as they are in true judgment. The mere employment of categories seems to stand independently of whether we use categories in judgment reflexively or non-reflexively (or whether it is used as a clear concept or not).³⁰⁸ In other words, we do not know whether we correctly use the categories in advance. The correct use of categories is incidental.

Now I will consider the two horns one by one. The first horn of dilemma has already been considered by Van Cleve himself: "Kant could get around the present objection by qualifying the needed extra premise thus: any categories used in making *true* judgments must apply to or be instantiated by the items judged about." But he quickly forestalls such a rejoinder: "if we make this change here, we must make a correlative change elsewhere in the Deduction to preserve its validity as a whole. We must now say (in the Synthesis Premise) that a necessary condition of our

³⁰⁷ It could be taken as a received view. See Prauss 1971 and Thöle 1991.

³⁰⁸ For the introduction of the dimension of obscure concepts see Grüne 2009, 97-102.

representations being U-related is not simply our having synthesized them, but our having synthesized them by means of true judgments. This is a claim for which Kant has advanced no argument whatever.” (1997, 89-90.)

I agree that a correlative change else must be made, but I do not think that it is made in the way Van Cleve suggests, namely, to change the condition of synthesis.³⁰⁹ The problem of Van Cleve’s diagnosis lies in his misunderstanding of the relationship between judgment and synthesis. Van Cleve assumes that it is the judgment that makes the synthesis possible, and thereby he commits himself to a strong conception of judgment that he has denied before. As Van Cleve writes: “One half of it is plausible—if representations are connected in a judgment, then they are U-related. But the converse half, which is what the bypass argument would need, is not plausible at all.” (1998, 87)³¹⁰ As I have mentioned, judgment is not *synthesizing*; rather, it is *synthesized*.

As for the second horn, one could argue that even false synthetic judgment is somehow grounded in experience. Here we must answer the question of whether categories employed in false judgment are instantiated in objects. However, the question is thornier, because we are challenging the Instantiation Principle when we claim that categories employed in false judgment are instantiated in objects.

The solution to the problem is to propose that the ground of synthetic judgment could *extend* from the *actual* experience to the *possibility* of experience. The modal notion of the possibility of experience is subject to quantificational analysis in terms of possible-world. Here a possible world is not a logically possible world, a maximum of logically consistent states of affairs. Rather, it is a really possible world, a maximum of nomologically consistent states of affairs. The laws of a really possible world are individuated by Kant’s synthetic *a priori* principles. Kant’s synthetic *a priori* principles that structure the possible world are extraordinarily general in content and limited in number³¹¹, and therefore they still permit a wide range of possible worlds.

A synthetic judgment is true when it obtains in the actual world. A synthetic judgment is false when it does not obtain in the actual world. It does not mean that it does not obtain in any world. A false yet really possible judgment is simply an expression of a state of affairs in another really possible experiential world. Remember that the employment of categories is the necessary

³⁰⁹ As we will see later, Kant’s *transcendental explanation* of judgment seems to be introduced precisely for this. In the master argument from self-consciousness, Kant has shown that synthesis is necessitated by the synthetic unity of manifold in one intuition.

³¹⁰ In effect, Van Cleve rejects the view that the combination of representations in one self-consciousness implies judgment.

³¹¹ The principle here is not the judgment-like entity, but the instantiated laws in the world. The principle as truth cannot make possible experience as being; otherwise, it would be a categorical mistake.

condition for a synthetic judgment to be a judgment at all. According to this line of thought, the employment of categories is the necessary condition for a synthetic judgment to be obtainable in some possible world.³¹²

8.7 The Objection to Instantiation Principle and a New Argument

8.7.1 The Instantiation Principle

The above objection from false judgment should not dwarf one far more radical charge, one that does not only plague all attempts by appealing to judgment, but also concerns the fundamental assumptions of the transcendental path. Remember that the argument from true judgment is limited in result. According to this charge, however, this version of argument does not achieve any result at all. The new argument from judgment in question is also inescapably vulnerable to it. This negative verdict is based on the following consideration: the very basic idea of the argument from judgment is misleading, for the assumption of the Instantiation Principle is inconsistent with some of Kant's most cherished metaphysical commitments. Thereby, we will see why any version of argument with reference to judgment is doomed to fail.

Now in what follows I will take under scrutiny the validity, scope and ground of Instantiation Principle. In its most purified and least controversial form, the Instantiation Principle claims that *the employment of concepts in true judgments implies their instantiation in objects*. For instance, if the judgment "all bodies are heavy" is true, then the property of heaviness are instantiated in all bodies.

The simplest form of Instantiation Principle could be extended from the logical matter to the logical form of judgment. The forms of judgment are necessary for any judgment, and specifically they are necessary for determining the *truth-value* of any judgment. Without forms of judgment, concepts are just a heap of unstructured general representations, and no claim to truth could ever be made. The argument simply cannot run like this:

- (1) Forms of judgment are employed in judgment.
- (2) Categories are instantiated in objects.

³¹² The introduction of the notion of really possible world seems to commit Kant to the existence of property, which is repeatable across a number of really possible world. As I have mentioned, Kant is a resolute detractor of Platonism of property. A closer consideration indicates that Kant's idealist account of property is compatible with repeatable entities, though the latter revive in Kant's philosophy in a new form.

Take substance for example, committed to the following Instantiation Principle of substance:

For any x , x is instantiated as a substance in experience if and only if the concept 'x' stands in the subject-place of categorical judgment.

In fact, this is how Aristotle discovers the existence of categories. To sum up, we could have an unrestricted version of the Instantiation Principle:

For anything x , x is instantiated if and only if it makes a semantic contribution to true synthetic judgment.

However, the Instantiation Principle is vulnerable to counterexamples. It seems that there could exist concepts which make a semantic contribution for determining the truth-value of judgments without being instantiated. Among them the most preeminent are logical connectives. All logical connectives are characteristically truth-functional and thereby they make a semantic contribution to the truth-value of judgments. In spite of their semantic contribution, some of them are not instantiated in the world. For instance, when the connective of the conjunction "and" is employed in a complex judgment, it partially determines the truth of the complex judgment in virtue of its meaning. However, it is not thereby instantiated *in concreto*.

Likewise, one might conjecture that the same objection could be extended and applied to the forms of judgment. While some forms of judgment are necessary for the possibility of judgment, there is nothing to prevent the forms of judgments from being uninstantiated. Why? This has something to do with Kant's rejection of the Platonism with regard to logic. Again, take logical connectives for instance. Let's suppose that Kant's framework of logic could absorb a theory of logical connectives whose logical behaviors are fully specified by classical propositional logic. If Kant wants to have a *theory* of logic, he should bestow certain metaphysical underpinning to logical connectives. Given his conceptualism of universal, in Kant's framework of logic the logical connectives are not Platonic entities. Rather, logical connectives are no more than *the general and symbolic mental representations*, namely, functions of subjective thinking.

If they are not instantiated, they still remain to be “the subjective condition of thinking”. What Kant is asking in the Transcendental Deduction is precisely how these subjective conditions could have relation to object. Even if it is shown that forms of judgments are indispensable for the validity of judgments, the task of the Transcendental Deduction has not yet been accomplished at all.

In order to save the Instantiation Principle, one could modify this principle in the following way. On the one hand, the logical matter of judgment can be instantiated. On the other hand, not all logical forms can be instantiated, for logical forms are concerned with the *relations* of concepts and judgments. In contemporary jargon, Kant is claiming that all non-relational predicate can be instantiated, whereas not all relational predicate can be instantiated. Consider the following example: “All bodies are heavy.” According to this interpretation, the concepts ‘body’ and ‘heavy’ are be instantiated, whereas it leaves open whether the relation of inherence is instantiated.

However, this proposal does not work. The thrust of Kant’s objection could not be explained merely by the difference between logical matter and logical form. This interpretation is misled by being confined to the cases of empirical judgment whose logical matter is empirical. Consider Kant’s rational judgments in the Dialectic. A judgment is a rational one if at least one of its predicates is the pure concept of reason. Within rational judgments a further distinction between analytic and synthetic judgment can be drawn. One instance of analytic rational judgments is ‘God is omnipotent’. One instance of synthetic rational judgment is ‘I am a substance’. In both cases, the concept of ‘God’ and the concept of ‘I’ cannot be instantiated, or in Kant’s own words, they cannot be given in intuition and do not have objective reality. It is not difficult to generalize the objection to a most devastating one: it is possible that all the elements in judgment make a semantic contribution to the truth-value of judgment without being instantiated.

(b) The Distinction between Metaphysics and Logic

Kant’s rejection of the unrestricted version of the Instantiation Principle is merely an instance of his overall rejection of the logicist approach to metaphysics, the assumption that logic is a secure and sufficient guide of metaphysics. This logicist metaphysics is encapsulated in logico-metaphysical isomorphism, whose fundamental idea is that the structure of thought is mapped into the structure of being. The long tradition of logicist metaphysics is initiated by Aristotle. Its modern representative is Leibniz, the greatest early modern Aristotelian, and its contemporary descendent

is early Wittgenstein. All of them are convinced that there is an isomorphism between logic and metaphysics such that logic is the sole and sufficient guidance to metaphysics.³¹³

In contrast, Kant holds that there is a clear-cut distinction between the discipline of logic and that of metaphysics,³¹⁴ and that logic by itself is not a sufficient and secure guide to metaphysics. Kant traces the tradition back to Aristotle and raises his objection in R4450 dated to between 1772 and 1778:

Aristotle erred by including in logic a division of general concepts by means of which one can think objects; this belongs to metaphysics. Logic has to do with concepts whatever they might be, and deals only with their relation. (AA 17:556)

In his other writings, Kant praises Aristotle for the invention of logic in one single strike, and also for the completeness of logic. Here Kant's criticism is directed against Aristotle's conflation of logic with metaphysics. This criticism to Aristotle is more severe than his attack on the incidental character of Aristotle's gleaning of the table of categories. Kant does not merely point out the difference between logic and metaphysics, but also further reaffirms where the distinction between logic and metaphysics lies: logic is concerned with the *relations* of concepts, while metaphysics with the *reference to the objects* of concepts.

In what follows I will discuss what Kant's conceptions of logic and of metaphysics are with reference to the structure of Analytic and Dialectic, in which this distinction lies at the heart. Kant's conception of logic is spelled out at the very beginning of *Analytic*, where Kant depicts the structure of the discipline of logic.³¹⁵ Consider the following passages:

The former [general logic] contains the absolutely necessary rules of thinking, without which no use of the understanding takes place, and it therefore concerns these rules without regard to the difference of the objects to which it may be directed. (A52/B76)

³¹³ It is dangerous to underrate the complexities of the thoughts of philosophers. The logical strand is perhaps best evidenced in Leibniz's *Discourse of Metaphysics*. The logicist reading of Leibniz's metaphysics is powerfully developed and defended by Russell (1992). Due to the complexity of Leibniz's thought, however, now this reading has been widely rejected for its oversimplification. Wittgenstein remarks that philosophy consists of metaphysics and logic, and that logic is its essence. Famously, Wittgenstein himself rejects the logico-metaphysics in his later works. Nonetheless, some aspects or some phases of their thought do reflect a general tendency to do metaphysics with the aid of logic.

³¹⁴ First, it could be found in Kant's publications that appear no later than *Inaugural Dissertation*. Furthermore, this is recorded in his repeated distinction between the logical and the real or the metaphysical in different forms.

³¹⁵ In the following what I have in mind by logic is the *general pure logic*, which is our present concern.

general logic[...] considers representations, whether they are originally given *a priori* in ourselves or only empirically, merely in respect of the laws according to which the understanding *brings them into relation to one another* when it thinks[.] (A56/B80)

First of all, as far as its *scope* is concerned, general logic is formal, for it abstracts *from all objects* of cognition. Therefore, it only has something to do with the mere form of thinking. (A54/B78) The forms of thinking are articulated in terms of the logical relations spelled out in the *Amphiboly*, namely, of identity and difference, of agreement and conflict, of matter and form, and of internal and external. One consequence of the *formality* character of logic is that it must be distinguished from metaphysics. Second, as pure logic it is *a priori*, for it is free *from the empirical* condition. The consequence of the *apriority* character of logic is that it must be distinguished from psychology.

In contradistinction to general logic, Kant conjectures that there would be “a logic in which one did not abstract from all content of cognition” (A55/B80). It is nothing but the famous transcendental logic. While transcendental logic is nominally a branch of logic, strictly speaking, it belongs to metaphysics.³¹⁶ Transcendental logic is ontology, or it serves as a successor discipline of traditional ontology. (A247/B303)

On the orthodoxical rationalist’s understanding, metaphysics is fundamentally analytic. Kant’s conception of metaphysics is characterized by its irreducible *reference to object*.³¹⁷ The reference to object implies that the pure concepts in the ontology should be instantiated in experience.

The irreducible distinction between logic and metaphysics provides a broad framework in which we could grasp Kant’s own approach to isomorphism. A further question is what Kant’s *ontological account of logic* is. In his contrast of general logic and transcendental logic, Kant concisely remarks that logic consists of the “rules of thinking”, but he does not delve into this further question. In order to appreciate this we had better turn to Dialectic, where Kant writes: “such a principle does not prescribe any law to objects and does not contain the ground of the possibility of cognizing and determining them as such in general, but rather is merely a *subjective law* of economy for the provision of our understanding[.]”(A305-306/B362)

Although Kant speaks of reason and inferences here, the same conclusion could be extended and applied to understanding and judgments. What differs transcendental logic of understanding

³¹⁶ Kant takes over the Wolffian distinction between special metaphysics and general metaphysics. Special metaphysics includes rational psychology, rational cosmology and rational theology, while general metaphysics includes ontology.

³¹⁷ This is evidenced by Kant’s formulation of the secret of metaphysics, which I have discussed in Chapter 1.

from the transcendental illusion of reason is merely Kant's manner of presentation along the course of his unfolding of his views: Kant is positive on the metaphysical use of understanding, while he is negative on the metaphysical use of reason, though he has yet to prove how the metaphysical use is impossible. As far as the logical use is concerned, however, Kant's position is consistent throughout both understanding and reason, or judgment and inference, though not always explicit and emphatic: the forms of judgment and inference are *formal* and thereby they are *subjective*. For instance, the "*formal and logical* procedure of reason in syllogisms" (A306/B363) is labeled as "merely a subjective law" (A306/B362).

In spite of its unparalleled success, the fact that logic is *subjective in character* is largely overlooked.³¹⁸ It must be determined in what sense logic is subjective. First, the *origin* of logic has seat in the human mind. The move of defining logic as the rules of thinking is to link the logic as a *science* with thinking as a human *faculty*. The ontological implication is that logic is merely the form of thinking. Second, rules or laws of logic are not automatically applied to objects. Combined with a Kantian explanation of general logic, logic is deeply subjective because it concerns with the sheer *form of cognition*. Or put it more straightforwardly, it is concerned with *the relations of cognition or of concepts*. Finally, Kant would conclude that reason is "a merely subordinate a faculty that gives to given cognitions a certain form, called 'logical' form, through which cognitions of the understanding are subordinated to one another, and lower rules are subordinated to higher ones (whose condition includes the condition of the lower rules in its sphere), as far as this can be effected through comparing them" (A305/B362).

Therefore, the paradoxical nature of logic emerges. On the one hand, logic is the *form for all kinds of cognition*. On the other hand, logic is rejected as the *form of all kinds of objects*; rather, it is regarded as merely the form of *subjective thinking*. Kant rejects the inference from the *form of cognition* of object to the *form of objects*: *if logic is the condition of cognition, then it must be the condition of objects*. For Kant, the universality of logic does not mean that it is instantiated in *everything*. Rather, it means that it is instantiated in *nothing*. The subjectivity of logic is important, for it defines the relationship of metaphysics and logic as that between being and thinking.

(c) Rejecting the Logicist Metaphysics.

³¹⁸ It is not surprising that Kant has different conceptions of subjectivity or objectivity in different periods. See R3970 (AA 17: 370), and 3974 (AA 17:371) for the objectivity of logic.

The principal reason for Kant's deviation from the logicist metaphysics in general and German rationalist metaphysics in particular lies in their irreconcilable conflict with his own metaphysical commitments. Kant would ask, if there is such isomorphism, what the *ground* of the isomorphism of thinking and being is. If there is an isomorphism, then there must be a ground of the isomorphism; if there is a ground of the isomorphism, it must be that either thinking grounds being, or being grounds thinking. If we are justified to make such inference from the logical realm to the real realm, then it implies that there exists a necessary connection between the structure of thought and the structure of the world.³¹⁹

In light of these assumptions, an isomorphism without grounding is simply *mysterious*. Giving a fact without giving an account is collapsing into the abyss of the ignorant, the opposite of explanatory rationalism. Now it becomes apparent that the ungrounded isomorphism rehabilitates pre-established harmony, to which Kant is always alarming. Moreover, it is also a quasi-Crusian version of intellectual pre-established harmony between thinking and things outside of thinking, which Kant explicitly and emphatically rejects in the *Prolegomena* and the 1787 *Critique*.

Remember that at the end of the B-Deduction Kant mentions "a middle way" (B167) and he offers a *complementary* argument against Crusian pre-established harmony in the name of preformation system. To be sure, Kant never explicitly ties his attack on pre-established harmony to his rejection of logicist metaphysics, and he never intends his argument against Crusian pre-established harmony as a criticism against the line of argument from the forms of judgment. Nevertheless, it is all-too reasonable to believe that the *logicist metaphysics* underlying this line of argument is incompatible with Kant's most underlying metaphysics commitments, in the same way the Crusian pre-established harmony is incompatible with his metaphysical commitments: causal theory of knowledge in particular and causal realism in general, which constitute the foundation of his rejection of any kind of pre-established harmony.

One worry is that whether Kant's disentanglement of the tight relation of metaphysics from logic is consistent with Kant's derivation of categories from forms of judgments. It should be noted, however, that Kant's disentanglement of the tight relation of metaphysics from logic is *restricted*. Kant does not claim that logic and metaphysics are irrelevant at all. In his Metaphysical Deduction logic still serves as the thread lines for the discovery of the concepts by means of which one can think objects. What Kant is stressing is that the logical functions of judgment cannot automatically be logically or conceptually identified with the concepts of the object in intuition.

³¹⁹ On this point idealism by itself would not help.

One pressing question is whether the identity thesis is subject to pre-established harmony objection. I believe it is not. Given the worry of pre-established harmony, Kant seems to subscribe to it with reservation. What kind of the Instantiation Principle does Kant embrace? One plausible interpretation is that Kant is committed to the *conditional version* of Instantiation Principle. His commitment is conditioned, for it rests on his assumption of causal realism. Again, let us take substance for example. Kant would endorse such a conditional Instantiation Principle:

For any x , x is a substance in experience if and only if the concept of x stands in the subject-place of categorical judgment *and it is related to experience*.

In this conditional principle, the relation to experience could take in two forms: either it is borrowed from experience or it makes experience possible. Or we could put it in the more familiar form: either concepts ground experience or experience grounds concepts. No instantiation or correlation holds without having a ground.

Given the above objections, the arguably best argument from judgment could be reformulated as follows:

- (AJ1) The synthetic empirical judgment lays a claim to truth.
- (AJ2) The truth-maker of synthetic empirical judgment is the possible intuition.
- (AJ3) The logical form of judgment is determined by categories as the higher-order concept.
- (AJ4) This determination in judgment must be grounded in the real determination in intuition.
- (AJ5) The intuition must be determined by real relations that are individuated as categories.
(Instantiation Principle)
- (AJ6) Categories are applied to appearances.

In other lines of argument, Kant attempts to prove directly that the manifold of intuitions is synthesized and categorized. In this line of argument from judgment, however, Kant must first prove that categories as analytic unity in judgment must be instantiated in the synthetic unity of intuition, and then argues that such intuitions are synthesized and categorized. Now the fate the

argument depends on whether the inference from (AJ3) to (AJ5) could be justified with the help of a conditional Instantiation Principle. While the conditional Instantiation Principle by itself is unproblematic to Kant, the appeal to it in the argument from judgment seems to precisely beg the question of the Transcendental Deduction, because what the Principle assumes is precisely what Kant would like to prove.

Chapter 9 The Argument From Perception

9.1 Introduction

It is noteworthy that the argument from perception is the only *original* argument in the B-Deduction, which is compressed in the concluding section §27. The argument from cognition is unique to the 1781 *Critique*. The argument from self-consciousness appears in both the 1781 *Critique* and the 1787 *Critique*. Whereas the argument from judgment is absent in the 1781 *Critique*, it is unmistakably anticipated by the *Prolegomena*. As far as I know, the argument from perception can find itself neither in Kant's official publications nor in his personal notes.

In fact, the argument from perception could be seen as Kant's official argument in the B-Deduction. In previous chapters, I distinguish several lines of Kant's arguments, each of which draws on different theoretical and conceptual resources. Those arguments are developed as if they stand independently of each other, without taking into consideration Kant's own official proclamation of his intention. In the transitional §21 of the B-Deduction, Kant does offer some elucidating official proclamations about his strategy and the design of the structure for achieving the objective of the Transcendental Deduction. It becomes more apparent that the separation of the previous arguments from the strategic context brings the risk of missing Kant's original intention. Let's call the argument that runs from §15 to §27 the official argument since it respects Kant's official claim about the structure and strategy of the B-Deduction.

The argument from perception is the only one that is located after Kant's elucidation of the structure and strategy of the B-Deduction. It might be debatable how we should read these official claims back into the previous arguments, and it is quite reasonable to expect that the argument from perception will be restricted by Kant's official claim. Hence, the question of the structure and strategy of the B-Deduction and that of the argument of perception are closely related.

While the argument is compressed, it is surprisingly informative. The argument from perception starts with an analysis of the conception of perception. In the course of the argument, however, Kant introduces the other premises that have been established in previous sections and independent from perception.³²⁰ While the argument from perception is located in only one section, it could refer back to and make use of all the previous results. Therefore, the official argument could be identified with the argument from perception.

³²⁰ The notion of perception is neither the sole nor the main conception on which Kant rests his argument. It seems difficult to find one central conception that dominates this argument. For the sake of convenience I will still reserve the name for it.

Again, I find the argument has little anti-skeptical potential. While the notion of perception might seem acceptable to skeptics, it is far from clear that the other premises Kant introduces are as thin as the perception premise. It is difficult to conceive, for example, that skeptics would accept Kant's substantial claims concerning the singularity of space and time. In fact, a response to the anti-skeptical reading looks redundant, for few have attributed an anti-skeptical reading to this argument by trying to find something useful in the very *concluding* section of the B-Deduction.

The argument from perception displays strikingly *synthetic* character. The premises of the argument could be roughly classified into four groups: Perception Premises, Space-time Premises, Synthesis Premises, and Categories Premises. In this light, the argument can be reconstructed as follows:

Perception Premises

(AP1) Perception is the representation of objects in sense. (Definition)

(AP2) Perception presupposes the synthesis of apprehension. (Radical Manifold)

Space-time Premises

(AP3) Space and time are the forms of intuition. (Apriority)

(AP4) Space and time are the formal intuitions of unity. (Singularity)

Synthesis Premises:

(AP5) The unity of space and time are conditioned by the synthesis of understanding. (Conceptualism)

(AP6) Everything in space and time is conditioned by the synthesis of understanding. (From AP5)

(AP7) The perception is conditioned by the synthesis of understanding. (From AP6)

Categories Premises:

(AP8) The synthetic unity of space is the synthetic unity of intuition in general. (Identification)

(AP9) The synthetic unity of intuition in general is conditioned by categories. (From Step 1)

(AP10) The synthesis of understanding is conditioned by categories. (Analogy)

Conclusion:

(AP11) Perception is conditioned by categories. (from AP7 and AP10)

(AP12) Experience consists in connected perceptions. (Definition)

(AP13) Experience is conditioned by categories. (From (AP11) and (AP12))

This chapter could be broken into two parts. In the first part I will address the structure and the strategy of the B-Deduction, and in the second part I will examine the argument from perception with reference to the result of the first part of the B-Deduction.

In section 9.2, I will formulate the general criteria of being a proof and being a step of either part of the B-Deduction with respect to the problem of its structure, and then I will examine and reject two rival readings respectively: the triviality reading and Henrich's reading. In section 9.3, I will provide my own reading that intuition in general is the abstracted intuition and its objects are *ens rationis*, and categories are merely forms of thought.

In section 9.4, I will inquire into Kant's final argument from perception, which heavily relies on the singularity of space to attain the required synthetic unity. In section 9.5, I will examine Kant's argument for the singularity of space in the Metaphysical Exposition. In section 9.6, I will argue for a conceptualist reading of the unity of space by explaining away the exegetically motivated objection. In the concluding section 9.7, I will point out that on the basis of the result of the first step, Kant makes a non-deductive inference by analogy to achieve his argumentative objective.

9.2 The Question of Structure

9.2.1 Phenomena of Distinct Parts and the Spectrum of Positions

The tension between what one says and what one does is not rare even in philosophers; Kant is no exception. Now the question is how seriously we should take Kant's official claims on his strategy and the structure of the argument. When we do not take Kant's official claims seriously at all, problems appear. First, the dismissal of Kant's official methodological considerations stands in conflict with the general interpretative principle of charity. Second, with the aid of Kant's explanation of his strategy we do make sense of some texts in the Transcendental Deduction. In §19 and §20 Kant does seem to execute his strategy, and the turn of focus to judgment is amenable to the requirement of abstraction.

When we take Kant's official claims too seriously, problems also arise. For instance, Kant's strategy requires the manifold of intuition to be abstracted from spatiotemporal forms. However, his abstraction strategy seems not consistent: the numerical identity of self-consciousness in §16 seems to implicitly make reference to states in *temporal* sequence, the illustration of drawing a line in §17 makes explicit reference to *spatial* determinations; the discussion of the empirical unity of apperception explicitly mentions "pure form of intuition in time" (B140) in §18. Furthermore, if we are convinced that Kant has only one single argument in the Transcendental Deduction, then both the earlier discussed argument from apperception and that from judgment and the later discussed argument from perception are only *pieces* of this large argument. Isolated from the methodological context, each of these lines of arguments would lose its independence.

While Kant does not execute his strategy as strictly as possible, I nonetheless believe that we should respect what Kant claims and it is worthwhile to see what emerges if we take seriously Kant's strategy and structure. In the following I will attempt to steer a middle way between the two cliffs to figure out the problem of structure.

The Transcendental deduction in the 1787 *Critique* ranges from §15 to §27. One of its most striking features is that Kant seems to draw the desired conclusion *twice*. Let me call the two results in the two parts respectively as (C1) and (C2). In §20, Kant claims that (C1) "the manifold in a given intuition also necessarily stands under categories" (B143). In §26, Kant claims that (C2) "the categories are conditions of the possibility of experience, and are thus also valid *a priori* of all objects of experience" (B161).

Despite the difference in their formulations, both claims seem to be qualified as conclusions. For as far as the objective of transcendental deduction is concerned, both affirm that categories are valid to a certain range of objects. Therefore, it is plausible to conclude that the general structure of the B-Deduction could be regarded as consisting of two distinct *parts*. The first part of the argument ranges from §15 to §20; the second step of the argument ranges from §22 to §27; and between the two parts is the transitional section of §21.

As for the controversy over the structure of the B-Deduction, there exist two main alternatives: (A) they are *two proofs*, and (ii) they are *two steps* in one proof. The observation that B-Deduction has two parts by itself implies neither that the two parts are *two proofs* nor that they are *two steps within one proof*. In order to settle the issue, we must delve into the text to see what Kant says and what he does. Given the existence of the two parts in the B-Deduction, the controversy over the structure of the B-Deduction comes down to two questions:

- (a) Whether the first part is an *adequate* argument for the desired conclusion (C).
- (b) Whether the second part is an *independent* argument for the desired conclusion (C).

In order for the B-Deduction to contain two independent proofs, the criteria of being two proofs could be spelled out in terms of (a) adequacy and (b) independence as follows. For two-proof proposal: (i) (C1) entails (C), and (C2) entails (C); in other words, both of them must be at least no weaker than (C); (ii) (C1) and (C2) are drawn from different premises such that they are different proofs. For one-proof proposal, the criterion is quite simple: (i) (C1) & (C2) entails (C), and (ii) either (C1) or (C2) does not entail (C). For the two-steps proposal, however, the criteria are more complex. There are generally two routes (R1) and (R2): either to weaken (C1) or to weaken (C2). According to (R1), the criteria are: (i) (C1) or (Pi) is *insufficient* yet *necessary* for (C), and (ii) (C2) entails (C). According to (R2), the criterion is: (C1) entails (C).

9.2.2 One Proof or Two Proofs?

(a) Two-Proofs Proposal

The two-proofs proposal was the received view, yet now it has been replaced by the one-proof proposal since Henrich's 1969 influential paper.³²¹ It is now generally agreed *that* the B-Deduction is a unified single proof consisting of two steps. However, commentators do not reach the consensus concerning the reading of *what* the specific relationship between two steps is. Like many interpreters, I embrace a loose one-proof proposal of the structure of the B-Deduction in general. Nevertheless, I believe that the two-proofs proposal is a very plausible view that is worthy of surveying, though few explicitly endorses it. In order to settle the issue, I will first formulate the general criteria of being one proof or two proofs, and then examine the exegetical reasons for two proposals. Then, I will provide my own reading of the two-steps structure of the B-Deduction. I believe that the two steps are bridged not by a deductive inference, but by an inference by analogy. That is, the link between the first part and the second part of the B-Deduction is *much looser* than other readings might permit. That is partly the reason why I am sympathetic to the two-proofs proposal.

³²¹ See Henrich 1969.

The old and dominant interpretative hypothesis claims that the B-Deduction contains *two independent proofs*. In fact, the two-proofs proposal is not surprising at all. First of all, there is no reason to *assume* that one section can *only* contain one argument. In the Aesthetic, Kant provides different arguments for the ideality of space and time. Take space in the 1787 *Critique* for example. In the Metaphysical Exposition, Kant accounts for the ideality of space and time from the phenomenal feature of spatial and temporal experience. In the Transcendental Exposition, Kant argues for the ideality of space and time from the modal feature of geometry.³²² Starting from different premises, Kant draws the same conclusion about his famous space idealism.

It is even more so when we take into consideration the general structure of the Transcendental Deduction in the 1781 *Critique*. After the preparatory section of threefold synthesis, the A-Deduction contains an argument from above and an argument from below, and these two arguments are usually considered as mutually independent ones. Anticipated and encouraged by the A-Deduction, it seems that nothing can prevent people from thinking that there *can* also be more than one independent argument in the rewritten the Transcendental Deduction in the 1787 *Critique*.

It is assumed that the two superficially similar results (C1) and (C2) yielded in §20 and §26 are identical, but the premises of (C1) and (C2) are different. The argument for the claim (C1) in §20 starts from the premise of *transcendental apperception*, while the argument for the claim (C2) in §26 starts from the premise of *empirical perception*. If one *same* conclusion is drawn twice from *different premises*, it is natural to suppose that there are distinct arguments. It appears that the B-Deduction is precisely the case.

For those who are convinced of the deep continuity between two editions of *Critique*, it is attracting to read the B-Deduction as a rework of the A-Deduction that even inherits the two-proof structure of the latter. In the B-Deduction, the first part from §15 to §20 constitutes an argument from above, while the second part from §22 to §27 constitutes an argument from below. Both parts are correspondent respectively to the more famous two official arguments in the A-Deduction. This line of interpretation is defended by Erdmann and Vleeshauwer.

Henrich's criticisms of the Erdmann-Vleeshauwer proposal is that in both arguments "the manifold of a sensible intuition is mentioned first" and thereby there is no reason to suppose that the argument in § 20 is literally an argument from above. This criticism is unfair. The argument from above does not mean that the manifold of intuitions must enter the argument in the last stage.

³²² Guyer holds that these two species of argument for idealism vary in the strength of the conclusion. See Guyer 2006, 58-67.

The argument from above is an argument from *apperception*, and the argument from below is an argument from *perception*. Since one central issue in Kant's discussion is the relationship between faculties and the given manifold, may it be pure self-consciousness or empirical consciousness, the reference to the given manifold is doomed to come into view at a quite early stage. Even though Henrich's rigid standard of argument from above is adopted and Kant's argument in §20 is rejected as one from above, it does not imply that B-Deduction does not contain two distinct proofs. What it shows is at best that there is overlap in both sets of premises of the two parts in the B-Deduction, which does not imply that their premises are the same set.

When encouraged by Kant's allusion to the distinction between a subjective deduction and an objective deduction in the A-Preface, the friends of the two-proof proposal would find that it is even more profitable to read Kant as fulfilling his promise by presenting two proofs in the B-Deduction. This the line of interpretation is defended by Adicks and Paton.

What makes the two-proofs proposal fail lies in that (C1) does not entail (C), therefore it does not satisfy the criterion (Ai), albeit it does not satisfy (Aii).

(b) One-Proof Proposal

In his 1969 famous paper, Henrich argues that the proof of the B-deduction is one proof with two steps, instead of two independent proofs. As Henrich points out, "[t]he interpretation must show that, contrary to the initial impression that the two conclusions merely define the same proposition... sections 20 and 26 offer arguments with significantly different results, and these together yield a single proof of the transcendental deduction. We shall call this task the problem of the two-steps in one proof."³²³ Henrich's two-step proposal is so successful that it has replaced the old and dominant interpretative hypothesis to become a received view concerning the proof-structure of the B-Deduction in contemporary literature.

In what follows I will give several reasons for the plausibility of this view. While the superficial resemblance between the two claims of (C1) and (C2) is supposed, on a closer reading, (C1) and (C2) are *not* identical with each other. Kant officially assigns different objectives to the two parts of the B-Deduction. In §26 Kant writes:

[...] in the **transcendental deduction**, however, their possibility [(the possibility of *a priori* categories)] as *a priori* cognitions of *objects of an intuition in general* was exhibited (§§ 20, 21). Now the possibility of

³²³ Henrich 1969, 642.

cognizing *a priori* **through categories** whatever *objects may come before our senses* [...] is to be explained. (B159-160)

The domain of (C1) in § 20 is concerned with the “objects of an intuition in general”, while the domain of (C2) in § 26 is concerned with the “objects **may come before our senses**” (B159). As Henrich calls into attention, “sections 20 and 26 offer arguments with significantly different results”, the difference in the validity of *the domain* of objects constitutes a primary reason to hold that (C1) and (C2) are different claims. (C1) and (C2) could be reformulated as follows:

(C1) categories are valid of the objects of an intuition in general.

(C2) categories are valid of the objects of our empirical intuition.

It is noteworthy that two different results do *not* immediately imply two proofs. In order to be two proofs of the same aim (C), (C1) and (C2) as the results of two parts do not have to be identical. It is possible that either of them is not identical with the other, but the desired conclusion (C) is logically or conceptually *entailed* by both (C1) and (C2). Suppose that (C1) claims that categories are applied to all kinds of sensible intuition, while (C2) claims that categories are applied to perception. (C1) and (C2) are not identical, but both of them entail the desired conclusion (C).

As I have mentioned, the difference in the results of both parts is far from the decisive evidence for the one-proof proposal. The singleness of proof is further evidenced by Kant’s official claim in the transitional §21: “[i]n the above proposition, therefore, the *beginning* of a deduction of the pure concepts of the understanding has been made” and there is more to be shown “[i]n the *sequel*”. (B144) The diction of “beginning” indicates that Kant has not yet put the argument to an end. And the contrast between “beginning” and “sequel” implies the singleness of proof between what has said before and what will be said. According to the criteria we have formulated, it amounts to saying that it satisfies the criterion (Bii) that (C1) or (Pi) is *insufficient* for (C).

While what Kant *says* in §21 is the primary inspiration for the conviction that Kant *intends* to formulate one single proof in the B-Deduction, the most decisive evidence for this proposal stems from what Kant *does* in the *actual presentation* of his argument in the second part of the B-Deduction. In §26 Kant writes:

But this synthetic unity can be none other than that of the combination of the manifold of a given **intuition in general** in an original consciousness, in agreement with the categories, only applied to our **sensible intuition**. (B161)

This passage constitutes the most crucial evidence for the view that some claim in the first part of the B-Deduction is essentially presupposed by the second part of the B-Deduction. Kant identifies the unity of space and time that is established in §26 with the unity of the manifold of intuition in general that is first established in §16 and §17 and then encapsulated in §20. Without this identification, Kant cannot bridge the unity of space and time with categories, and thereby he cannot draw the desired conclusion of transcendental deduction. According to the criteria of one-proof, Kant here shows that it satisfies the criterion of (Biii) that the first part is *necessary* for the second part of the B-Deduction to attain the final aim.

9.2.3 Triviality Reading

The acceptance of the one-proof proposal merely marks the beginning of a new controversy about what the two steps amount to. In the following, I will survey three readings of the one-proof proposal: the triviality reading, the Henrich reading, and my own reading.

Now suppose that we accept the proposal that (C1) the first part of the B-Deduction is concerned with the objects of sensible intuition in general, while (C2) the second part with the objects of our human sensible intuition. The key to determining the relationship between (C1) and (C2) is to clarify what intuition in general means. Taken literally, intuition in general refers to any kind of intuition whatsoever. Although Kant does not often make explicit the sensible character of intuition in general, his following remarks indicate that intellectual intuition is not his very concern.³²⁴

Based on this most natural reading of the intuition in general, we can obtain an *a priori* conceptual truth that human intuition is a species of intuition in general. Obviously, (C1) conceptually implies (C2) with the aid of the additional, and trivial, premise that our human sensible intuition is obviously a species of sensible intuition in general as the genus. The outline of the argument in the B-Deduction will be presented in the following manner:

(T1) All sensible intuitions in general imply the application of categories.

(T2) Human empirical intuition is one species of sensible intuition in general.

(T3) Our human intuition implies the application of categories.

Note that the claim (T2) appears to be introduced as an *additional* premise. But (T2) is not stated explicitly by Kant in anywhere of the B-Deduction. It is not arbitrary to attribute this quite *trivial* conceptual truth to Kant, of which little textual evidence is required. Although Kant never explicitly makes such an easy inference, in effect, the claim (T1) is adequately strong to entail the claim (T3).³²⁵

Although there is no inherent philosophical problem in this reading, it suffers from the interpretative challenges. The most interpretative challenge is that, if it is Kant's view, it leaves unmotivated the fact that Kant bothers himself to write the bulk of the second part of the B-Deduction. It is natural to assume that Kant makes *substantial* claims in the second part and that some of these substantial claims are *indispensable* for the completion of transcendental deduction. I believe that almost all commentators are adherent to both assumptions. The trivial reading stands in conflict with both the assumption that Kant says something substantial in the second step and the assumption that it is indispensable for the B-Deduction.

At least, the triviality reading is obliged to offer an additional account of the *nature* of the second part of the B-Deduction. In contrast, the one-proof proposal is not inflicted by this problem, since it affirms that the second part is a *step within* one single proof. To be sure, after the determination of the nature of the second part it can be further debated on other questions. But it is not a debate on the nature of the second part. It is a further question to determine *the nature of the second step*.

Given these considerations, it is suggested that the first part of the B-Deduction constitutes *one independent proof*. To be sure, the independence of the first part of the B-Deduction does not imply the independence of the second part of the B-Deduction and thereby it does not result in the two-proofs proposal. For the sake of argument, however, it seems to render the second part redundant.

³²⁵ In fact, the genus-reading seems that it is simply not Kant's own view; no text indicates that Kant claims that intuition in general is the genus of our human sensible intuition.

The concession to this interpretative alternative undermines the commitment to the two-steps reading in general. It violates one of the one-proof criteria that (C1) is insufficient to draw the desired conclusion (C). While it does not immediately imply a resurrection of the two-proofs proposal, it leaves room for it.

The presumably most natural interpretation of the structure of the B-Deduction poses an additional and general interpretative challenge for all proposals, and all proposals should meet this challenge, whether negatively or positively. In fact, all interpretations of the relationship between the two steps of the B-Deduction could be seen as dividing themselves in terms of how to respond to this triviality challenge. As I have indicated, there are two basic routes of responses to this challenge.

(R1): One might accept that the argument in the first step is adequate for the aim of the transcendental deduction, and meanwhile simply reject the implied triviality as a genuine challenge. Making this move is to bite the bullet by saying that the first step is essentially *complete* and the second step is indeed trivial. But here the triviality should be properly understood. The second step is trivial not in the sense that it is *uninformative*, for it makes a number of substantial claims; rather, it is trivial in the sense that it is *argumentatively unnecessary*, for the basic argumentative aim has been attained in the first step. Along this interpretive route, there could be two readings. On one reading, in the first part of the B-Deduction Kant has already successfully established his desired conclusion *that* categories are necessarily applied to objects of sensible intuition in general. The second part of the B-Deduction is merely to spell out *how* categories are necessary so. On another reading, the first part of the B-Deduction establishes that categories are valid of objects of experience, while the second part draws the conclusion that categories are *only* valid of objects experience.³²⁶

(R2): One could reject the argument in the first part as adequate for the aim of the transcendental deduction, and thereby meet the triviality challenge by assigning a distinctive task for the second part of the B-Deduction. Most commentators adopt the second route that (2) the first step is *inadequate*. According to this interpretative direction, it is argued that the conclusion (C1) in the first step falls short of the aim of transcendental deduction *in different ways*. In the following I will consider two readings of the general structure of the B-Deduction. The former is offered by Henrich,³²⁷ and the latter by Allison.³²⁸

³²⁶ The textual support could be found in in §23.

³²⁷ See Henrich 1969 and 1984.

³²⁸ See Allison 2004 and 2015.

9.2.4 Henrich's Reading

(a) An Analysis

On Henrich's view, Kant first establishes a restricted conclusion that the manifold of intuition stands under categories only insofar as a unity has already been contained in the intuition; and then an unrestricted conclusion is established that all the objects of human sensible intuition stand under the categories after the restriction is overcome by introducing the fact that we do have this unity in our intuition. Henrich himself seems not to realize the triviality challenge, but his characteristic reading appears to be precisely immune from the triviality objection. Consider Henrich's verdict in the following crucial passage:

(T1) The result of proof in section 20 is therefore valid only for those intuitions which already contain unity. (T2) That is, wherever there is unity, there is a relation which can be thought according to the categories. (T3) This statement, however, does not clarify for us the *range within which* unitary intuitions can be found. (1969, 645)

As I understand, Henrich's proposal is ambiguous, since it invites three readings: it could be read as stressing the restriction of the domain of the objects of the claim, or it could also be read as stressing the conditional necessity of the claim, or else it could be read as the combination of the two former readings. In the following, I will examine them one by one. According to (T1), we can have a scope reading of the general structure of the proof in the B-Deduction, and thereby we have a counter-intuitiveness objection to it:

(Hs1) Categories are valid of the objects of the intuitions of unity.

(Hs2) Categories are valid of objects of intuitions.

It does not consider the way in which the restriction is removed. According to (T2) and (T3) in the quotation, we can have a conditionality reading of the structure of the proof in the B-Deduction, and thereby we have a non-actuality objection to it:

(Hc1) If intuition is of unity, then it implies the application of categories.

(Hc2) In fact, our human intuition is of unity.

(Hc3) Our human intuition implies the application of categories.

According to Henrich's interpretation, (Hc1) is the conclusion of the first step, and (Hc2) is the claim established in the second step, and then the conclusion (Hc3) is drawn from the premise (1) and (2). If both (H1) and (H2) are true, then it logically follows that (H3) is true by *modus ponens*. Combining (T1), (T2) and (T3), a final reading of Henrich's proposal could be reconstructed as follows:

(Hf1) All objects of intuition with unity are subsumed under categories.

(Hf2) Some of our intuitions are of unity.

(Hf3) Some objects of our intuition are subsumed under categories.

(Hf4) All objects of our intuition are of unity.

(Hf5) All objects of our intuition are of unity. (from Hf1 and Hf4)³²⁹

One obvious merit of Henrich's proposal is that it avoids the triviality objection. The triviality objection says that in order to infer from (C1) to (C2) no substantial claim needs to be made in the second step. However, the premise (H2) is precisely introduced in the second step by Kant and it lays substantial claims on the nature of space and time and therefore it is by no means trivial.

Furthermore, Henrich's reading does not only avoid the triviality objection, but it also constitutes the most balanced reading of the two parts of the B-Deduction. *Both* the first step and the second step of the B-Deduction establish substantial and necessary claims for the final aim of transcendental deduction. As we will see, both Allison's reading and my reading seem to be driven by the triviality objection to the opposite direction that entices the trivialization of the first step of the B-Deduction.

Based on the philological analysis, Henrich's proposal brings a general interpretative bonus by calling into attention the difference between *an* intuition and *one* intuition. One intuition implies the intuition has been subsumed under categories, while an intuition leaves undetermined its

³²⁹ Henrich does not say that Kant does not show the actuality of the unity for any intuition. His formulation leaves room for avoiding the problem.

relation to categories. A similar distinction between the manifold of intuition and the unity of intuition is made conspicuous by Wilfred Sellars.³³⁰

The conditional claim (H1) that any unitary intuition implies the application of categories is of vital importance. No matter how we read the structure of the B-Deduction, the link between the unity of intuition and the application of categories plays an indispensable role in §26. In §26 Kant explicitly identifies “this synthetic unity” as “that of the combination of the manifold of a given **intuition in general** in an original consciousness, in agreement with the categories” (B161), and thereby links the synthetic unity of space and time with categories.

Along this line of reasoning, another kind of triviality in inference emerges. According to Henrich’s proposal, the second step is not trivial, and it instead respects the substantial claim Kant makes in the second step. Nonetheless, the triviality of an inference could be understood in two significantly different senses. In one sense, the *premise* involved in the inference is trivial. In the other sense, the *inference* to the conclusion is trivial. The triviality in the second sense is by no means harmful; it is instead desired for its logical validity. The reason I single out this kind of triviality is not that it is undesirable, but that it is the general route adopted by almost all commentators.

While the followers of the first route are bothered by this new triviality, the followers of the first route involve triviality in two different senses. The common strategy adopted by the followers the second route is to incorporate some claim in the first step into the second by considering it as the indispensable premise to entail the conclusion as the logical consequence of their conjunction with some other premise established in the second part. If Kant does reason in this way, he is strengthening, rather than weakening, his argument.

Although the followers of the second route meet the triviality challenge by rejecting the second part as inadequate for the aim of the transcendental deduction, they cannot escape the triviality in the second sense. Nevertheless, this route still revives the genus-species on another level.

- (1) Every unity implies the application of categories.
- (2) Space and time and thereby the manifold within them are of unity.
- (3) Everything in space and time implies the application of categories.

³³⁰ Sellars 1968, 2-8.

(b) Particular Objections

Allison charges that Henrich's view is counter-intuitive. On Henrich's proposal, the first step contains a restriction, and the second step removes the restriction. Allison argues that, if Henrich's reading is correct, then it implies that the claim (C1) of the first step is broader than the claim (C2) in the second step. According to the text, however, the objects of sensible intuition in general in the first step seems broader than human sensible intuition in particular.³³¹

As I understand it, Allison's view is too simplistic. The domain of the claim cannot be determined merely with the aid of the literal meaning of "removal of restriction". The removal of a restriction does not automatically make a claim broad. As I have formulated before, Henrich's proposal does not have to be understood in the light of the Scope Reading. It could instead be understood as a hypothetical syllogism in the light of the Conditionality Reading. In this syllogism, (H1) does not entail (H3), nor does the converse hold. It is hasty to attribute to Henrich the view that (H1) is broader than (H3).

If we do not understand the breadth of the scope of the claim in terms of genus-species relation, it seems that, in a loose sense, (H1) is broader, or stronger, than (H3). (H1) holds that categories are valid of all objects of sensible intuition as long these intuitions are of unity. In contrast, (H3) merely claims that categories are valid of the objects of human sensible intuition. While Henrich's formulation is somehow misleading, his proposal does not violate the supposed basic intuition Allison embraces.

The restriction that is to be removed can be understood as the antecedent of a conditional. If the removal of the restriction implies the transition of a narrow claim to a broad claim, it amounts to saying that the consequent, or its logical consequence, is broader than the conditional, which obviously makes no sense.

(c) General Objections

In my view, the price Henrich's proposal pays is that it seems that it is not Kant's view. In the above syllogism the major premise (H1) is true, but it is not the result of the first step of the B-Deduction. Although there is a distinction between intuition with unity and intuition without unity

³³¹ Allison 2015, 327-329.

in Kant's text, it does not follow that this is what Kant would stress on the issue of the relationship between the two parts.

Henrich's interpretation can find textual support from the B-Deduction. First of all, before Kant officially introduces the notion of the unity of intuition, in §16 Kant has used the locution repeatedly: "the manifold representations that are given in a certain intuition" (B132), "these representations given in intuition" (B134), and "the manifold given in an intuition" (B135). Nevertheless, Kant does not affirm that the intuition in which the manifold representations are given has the property of unity. In other words, Kant does not say explicitly that those manifold are given in *one* intuition, i.e., intuition with unity. As I have argued in Chapter 7, in §16 Kant proves, rather than assumes, that all representations are combined in one and the same self-consciousness.

Furthermore, Henrich (1981) quotes the important footnote in §21 to justify his emphasis on the unity of intuition:

The ground of proof rests on the represented **unity of intuition** through which an object is given, which always includes a synthesis of the manifold that is given for an intuition, and already contains the relation of the latter to unity of apperception. (B144f)

With technical device Kant unmistakably stresses the importance of the "unity of intuition" and explicitly specifies its role as the ground of proof (Beweisgrund). It seems to be a decisive support for Henrich's interpretation.³³²

My objection goes as follows. According to the previous reconstruction, what is at issue is the relationship between sensible intuition in general and human sensible intuition. It is natural to suppose that sensible intuition in general is the genus of human sensible intuition. If that holds, it presupposes that the notion of intuition in both terms are *identical in type*. On Henrich's proposal, however, what is at stake seems to be the relationship between the intuition with unity and the intuition without unity, viz., intuition in radically different types. The use of the hypothetical language is just to indicate that it is a condition for categories within the first step rather than to suggest that it is a condition to be removed by introducing another fact from without.

It is far from clear, however, that the "*ground of proof*" is the *result of proof* in the first step. It seems to be a mistake of the premise for the conclusion. By the "the represented **unity of intuition** through which an object is given" Kant establishes the link between the unity of intuition and the

³³² See Henrich 1984.

notion of object. By the link Kant alludes to his move in §17 to establish the link by defining that “[a]n **object**, however, is that in the concept of which the manifold of a given intuition is **united**” (B137).

Moreover, the most serious problem afflicting Henrich’s proposal is that he is convinced that the claim is only a hypothetical, not a categorical one. To be sure, Kant does affirm that all manifold stands under the categories *insofar as* they are given in a unified intuition. However, the actuality of the original unity of apperception and thereby the synthetic unity of intuition has already been achieved in §16 and in §17. Specifically, Kant does not *suppose* that in the manifold representations the numerical identity of self-consciousness can be encountered; rather, he *asserts* it as an *a priori* truth. There is no reason to suppose that Kant merely affirms a conditional truth.

9.3 The Abstraction Reading Recommended

9.3.1 The Abstracted Intuition

Alternatively, I suggest that the meaning of intuition in general should be understood with reference to Kant’s characteristic abstraction strategy. Kant explains his strategy in the transitional part as follows:

...since the categories arise **independently from sensibility** merely in the understanding, I *must abstract from* the way in which the manifold for an empirical intuition is given, in order *to attend only to* the unity that is added to the intuition through the understanding by means of the category.(B145)³³³

As Kant indicates, the way in which the manifold is given to the empirical intuition is abstracted away, and what is left is the sensible intuition without space and time as its form. It sheds light on how one should understand the notion of intuition in general in conclusion (C1).

The concept of intuition in general is not one whose extension includes all the actual sensible intuitions and thus the human intuition in particular. Nor does it include all possible sensible intuitions as long as the conceived intuition is logically coherent under the definition. Rather, intuition in general should be understood as abstracted intuition, that is, the intuition whose particular forms are abstracted away, and thus those elements contingent to the definition of intuition are abstracted away. After the abstraction of the form of our sensible intuition, what is

³³³According to Kant’s *Anthropology*, attention and abstraction are the two forms of consciousness. (AA 7:131) In the B-Deduction Kant employs this pair of concepts in a methodological manner.

left for us is a new kind of intuition, the abstracted intuition. Accordance to the definition, this abstracted product is sensible intuition, for the two definitive features of referential immediacy and extensional singularity are true of abstracted sensible intuition.

Nonetheless, this kind of abstracted intuition cannot be instantiated. It cannot be encountered in any species of finite being equally of sensible intuition characteristic of different forms. The form of sensible intuition is essential and fundamental to it. Kant seems to embrace the assumption that all sensible intuitions are subject to hylomorphic analysis. Accordingly, the matter without form simply does not exist. Take an example for illustration. When a biologist begins his study of panda, he could abstract from the color and attend to the biological properties and behaviors of a panda. However, the concept of the uncolored panda simply cannot be instantiated.³³⁴

9.3.2 Objects of Abstracted Intuition

What are the objects of intuition in general? I propose that the objects of intuition in general are noumena in the negative sense. Consider Kant's definition of noumena in the negative sense:

If by a noumenon we understand a thing **insofar as it is not an object of our sensible intuition**, because we abstract from the manner of our intuition of it, then this is a noumenon in the **negative** sense. (B307)

As Kant makes clear, when we abstract from the manner of our intuition, the objects of the abstracted intuition are noumena in the negative sense. And Kant emphasizes that objects of abstracted intuition are *not* objects of *our* sensible intuition.

The reference to the Phenomena-Noumena chapter is crucial for understanding the structure of B-Deduction and the relevant questions. Kant's use of abstraction as well as the forms of thought is absent in the 1781 *Critique* and is later added to the 1787 *Critique*. It is not implausible to even conjecture that the B-Deduction and Kant's distinction between the negative sense and the positive sense of noumenon are composed nearly at the same time when Kant has a more comprehensive understanding of these two issues.

Even if one might doubt that the terminology of abstraction does not suffice to support the conjecture that Kant has the same thing in his mind when he uses this term, I believe that the worry

³³⁴ The natural reading of intuition in general conflates the abstracted object with the abstracted concept. What I am suggesting is that we should distinguish between them.

could be dispelled by Kant's following remark that "categories... have significance only in relation to the unity of intuitions in space and time" (B308). That is precisely how Kant argues in §26 for the objective reality of categories with reference to the unity of space and time.

Then, we must determine the precise meaning of the noumenon in the negative sense. In the next crucial paragraph, Kant writes:

Now the doctrine of sensibility is at the same time the doctrine of the noumenon in the negative sense, i.e., of things that the understanding must think without this relation to our kind of intuition, thus not merely as appearances but as things in themselves, but about which, however, it also understands that in this abstraction it cannot consider making any use of its categories, since they have significance only in relation to the unity of intuitions in space and time, and can even determine this unity *a priori* through general concepts of combination only on account of the mere ideality of space and time. (B307-B308)

The concept of a noumenon, i.e., of a thing that is not to be thought of as an object of the senses but rather as a thing in itself (solely through a pure understanding), is not at all contradictory; for one cannot assert of sensibility that it is the only possible kind of intuition. (B310)

In addition, Kant offers various characterizations of noumena in the negative sense. Noumena in the negative sense are "things that the understanding *must* think without this relation to our kind of intuition" (B307); noumena are "beings of understanding" (B308). In his table of nothingness, Kant characterizes noumena in the negative sense as *ens rationis*³³⁵:

(1) To the concepts of all, many, and one there is opposed the concept of that which cancels everything out, i.e., **none**, and thus the object of a concept to which no intuition that can be given corresponds is = nothing, i.e., a concept without an object, like the noumena, which cannot be counted among the possibilities although they must not on that ground be asserted to be impossible (*ens rationis*),^c or like something such as certain new fundamental forces, which one thinks, without contradiction, to be sure, but also without any example from experience even being thought, and which must therefore not be counted among the possibilities. (A290-291/B347)

Kant's different characterizations of noumena in the negative sense seem to result in a logical inconsistency. On the one hand, if noumena in the negative sense are things of understanding, they are merely thought-entity without any reality. On the other hand, if noumena in the negative sense are things in themselves, then they are of some non-physical metaphysical reality.

³³⁵ For an analysis of Kant's thought-thing see Rosefeldt 2000, 75-77.

Note that Kant does not say that things of understanding or objects of abstracted sensible intuition are not appearances, but things in themselves. What Kant says is that objects of abstracted sensible intuition are “*not merely* as appearances but as things in themselves” (B307).³³⁶ Kant is committed to the view that if the form of our sensible intuition is abstracted from it, then the appearances and things in themselves are *numerically identical*.

The claim on the identity of appearances and things in themselves is perplexing. One familiar way of identifying appearances with things in themselves is to adopt the metaphysical theory of transcendental realism. However, the noumena in the negative sense here stand independently of idealism-realism spectrum. Now the problem is that Kant seems to suggest that there is *another* way of identifying appearances with things in themselves.

I suggest that we could resolve the problem in the following way. Noumena in the negative sense are appearances because they are the objects of intuition. According to Kant’s definition, appearances are the undetermined objects of intuition. The notion of appearances is by definition deeply *relational*; different kinds of sensible intuition have different kinds of appearances. It is groundless to suppose that appearances can only be appearances for our human beings. To be sure, the abstracted sensible intuition cannot be instantiated. We nonetheless can postulate objects for it, though these objects can never be given to human or any other sensible beings. By definition these objects of abstracted sensible intuition are nothing but appearances. Accordingly, things in themselves and appearances under two different kinds of description converge together.

The objects of intuition in general are thought-things, whereas the objects of human intuition are the things in space and time. In this light, the domain of the objects of intuition in general is an entirely distinct set of objects from that of the objects of human intuition. The two sets of objects *must* have no intersection with each other. Or rather, they are the objects of two distinct worlds available to us under different cognitive condition. Therefore, one cannot simply jump from (C1) to (C2) by a deductive inference by interpreting intuition in general as the genus of sensible intuition.

One might raise the objection that the scope of logical objects is broader than that of real objects. This objection assumes that non-contradiction is the *only* condition of being thought-thing. This seems to be supported by Kant’s own remarks that “I can **think** whatever I like, as long as I do not contradict myself, i.e., as long as my concept is a possible thought” (Bxxvi).

However, non-contradiction is not the sufficient condition for something to be a *thought-thing*. The other negative yet necessary condition for being thought-thing is that it must *not* be the objects

³³⁶ Occasionally, Kant’s uses “not only” for “not”.

of cognition. If some thought-thing can be given in intuition, it is not a thought-thing. The point is that there exists a *disanalogy* between the logical possibility/real possibility distinction and the thought-thing/things in space and time distinction. While all objects of cognition must be logically possible, one cannot draw a parallel conclusion that an object of cognition must be a thought-thing.³³⁷

Therefore, it seems that my proposal creates an interpretative puzzle why Kant takes a detour to first show that categories are valid of a domain of objects that is *irrelevant* to the very domain of objections at issue. One might doubt what argumentative utility the first step of the argument has. However, we should not draw such a hasty pessimistic conclusion. The deductive inference is not the only respectable inference. As I will show at the end of this chapter, Kant makes use of the inference by analogy to achieve his final argumentative objective.

9.3.3 Forms of Thought and Intellectual Synthesis

What is the Kant's inner logic between the two steps of the B-Deduction? I believe that it is profitable to make an appeal to Kant's crucial distinction between *thought* and *cognition* to understand the relationship between the two steps of the B-Deduction. Along this line of interpretation, in the first step Kant intends to establish that categories as *forms of thought* are valid of the objects of thought, while in the second step he intends to establish that categories are valid of the objects of cognition.³³⁸

Kant's principle of cognition remains unchanged throughout the two editions of the *Critique*. The principle of cognitions claims that through concept an object is thought, and through intuition an object is given. We might call intuition the sensible condition of cognition, and concept (or thought) the intellectual condition of cognition. Kant's systematic and emphatic explication of the *difference* between cognition and thought can only be found in the 1787 *Critique*. Kant's discussion of the distinction between thought and cognition is pervasive in §22, §23, and §24 of the second step of the B-Deduction. At the very beginning of §22, Kant writes explicitly:

To **think** of an object and to **cognize** an object are thus not the same. For two components belong to cognition: first, the concept, through which an object is thought at all (the category), and second, the intuition, through which it is given[.] (B146)

³³⁷ All really possible objects are logically possible objects. However, *not all logically possible objects are thought-things*.

³³⁸ For similar views see Allison 2015. It is surprising that Allison does not make appeal to the important distinction. Based on this distinction, my view on the status of the first step of B-Deduction is more pessimistic.

The technical term “intuition in general” does not stand alone; rather, there are systematically related terminologies in the B-Deduction. Kant dubs and introduces into the 1787 *Critique* the technical term “forms of thought (*Gedankensformen*)” that is absent in the 1781 *Critique* in the hope of marking the distinctive status of categories in cognition. One might suppose that the introduction of forms of thought is meant to be a parallel to the forms of intuition (*Anschauungsformen*). If intuition is necessary for cognition, and the forms of intuition are necessary for intuition, then forms of intuition are necessary for cognition. The same line of reasoning could be extended to thought. Forms of thought as the intellectual condition of cognition is indispensable for the cognition of objects as well.

Kant’s remarks on the forms of thought can only be found in Kant’s new addition in the 1787 *Critique*. Consider the following passage:

The pure concepts of the understanding are related through the mere understanding to objects of intuition in general, without it being determined whether this intuition is our own or some other but still sensible one, but they are on this account mere **forms of thought**, through which no determinate object is yet cognized. The synthesis or combination of the manifold in them was related merely to the unity of apperception, and was thereby the ground of the possibility of cognition *a priori* insofar as it rests on the understanding, and was therefore not only transcendental but also merely purely intellectual. (B150)

This pivotal passage is illuminating for two reasons. For one thing, it confirms my previous proposal of the abstraction reading of the intuition in general. Kant explicitly says that in intuition in general we are not in a position to determine whether it *is* ours or not, which can be seen as a refutation of the *genus conception* of intuition in general that underlies the triviality reading of the structure of the B-Deduction. Note that no determinate cognition does not suggest that there is indeterminate cognition.

For another, it helps clarify the conceptual relation between categories, forms of thought, and the objects of intuition in general. Here Kant claims that categories are delegated as the forms of thought, and that the forms of thought are introduced to designate the nature of categories when they are related to objects of intuition in general. Kant makes it explicit that in the first step of the B-Deduction categories are nothing but merely forms of thought, and the objects are abstract correlates of intuition in general.

One might wonder what the forms of thought are. A natural interpretation seems to identify *forms of thought* with *forms of judgment*.³³⁹ This view is rejected by Kant, however. Kant explicitly claims that the synthesis or combination of the manifold takes place in “**forms of thought**” (B150). In a note that appears at the start of the Phenomena-Noumena Chapter in Kant’s copy of the 1781 *Critique*, Kant writes that categories “are only forms of thought for bringing the manifold of intuitions to synthetic unity of apperception” (AA 23:35). In the General Note on the System of Principles added to the 1787 *Critique*, Kant writes that “the categories are not *by themselves cognitions*, but mere **forms of thought** for making cognitions out of given intuitions” (B288-B289). Forms of judgment cannot make cognition out of given intuitions. Since the forms of thought are used for combining the manifold of intuitions in the unity of apperception in order to produce a cognition, and, as I have proposed, the cognition in the Transcendental Deduction refers to the *unified* intuition, the forms of thought are not the forms of judgment, but the categorical form of intuition.

In addition to forms of thought, Kant also coins another term “intellectual synthesis (*synthesis intellectualis*)” to match with the intuition in general. Kant discusses the intellectual synthesis in contrast to the figurative synthesis:

This **synthesis** of the manifold of sensible intuition, which is possible and necessary a priori, can be called **figurative** (*synthesis speciosa*), as distinct from that which would be thought in the mere category in regard to the manifold of an intuition in general, and which is called combination of the understanding (*synthesis intellectualis*)”[.] (B151)

Figurative synthesis is generally regarded as one that is operative in the second step of the B-Deduction and responsible for making a causal difference on sensibility. It is quite plausible to suppose that intellectual synthesis plays a role in the first step of the B-Deduction. The notion of figurative synthesis is familiar to us; its new and precise name of figurative synthesis is another expression of transcendental synthesis in the A-Deduction. However, it is not so easy to determine what intellectual synthesis is. According to one interpretation, intellectual synthesis is identified with the action of *making a judgment* or the *logical functions* of judgment.³⁴⁰ Insofar as a judgment is

³³⁹ Longuenesse defends such a view. See Longuenesse 1998, 243.

³⁴⁰ According to Longuenesse, *synthesis intellectualis* is “achieved by logical functions of judgment, according to its logical forms”. (1998, 245) Longuenesse’s reading the structure of B-Deduction is guided by her crucial two-aspect view of the understanding, and she believes that the structure of the B-Deduction is correspondent to the structure of the understanding. The first step is concerned with the discursive aspect of understanding as judging, and the second step is concerned with the intuitive aspect of understanding as sensible synthesis. On my view, this neat parallelism cannot be found in Kant. The first step can hardly be one argument with reference to merely the

both spontaneous and discursive, this interpretation does have initial plausibility. This initial plausibility soon disappears when Kant claims that intellectual synthesis is “thought in the mere category in regard to the manifold of an *intuition in general*”.

Both misunderstandings could be traced back to the identification of *thinking* with *judging*. Kant famously defines the understanding as the faculty for judging in the following passage: “[w]e can, however, trace all actions of the understanding back to judgments, so that the understanding in general can be represented as a **faculty for judging**.” (A69/B94) In what follows Kant offers a second characterization of the understanding as “faculty for thinking”. Kant continues that “according to what has been said above it is a faculty for thinking. Thinking is cognition through concepts. Concepts, however, as predicates of possible judgments, are related to some representation of a still undetermined object” (A69/B94).

Kant specifies the essential aspect of thinking as the employment of *concept*. Here the concept does not refer to the category. All cognitions, whether they are through concept or not, require the category to think an object. If so, Kant’s specification of “cognition through concepts” would be too indiscriminate. As Kant makes clear, by concepts he refers to ordinary empirical concepts which can function as the predicate in judgment.³⁴¹ Given these considerations, it is very natural to suppose that the difference in Kant’s characterizations of the understanding respectively as the faculty of judging and as the faculty of thinking is merely verbal.³⁴² His substantial view is instead that *thinking is identical with judging*.

However, I believe that this line of thought is vulnerable to the following objections. First, it is difficult to see that the judgment characterization exhausts *all* the functions of thinking. As the title of this section “On the logical use of the understanding in general” makes clear, in this section Kant is concerned not with understanding in general, but merely with its logical use, i.e., its capacity in building a concept and making a judgment. It is reasonable, and indeed widely recognized, to characterize the understanding as judging and conceptual or discursive thinking. It does not follow, however, that Kant’s characterization of thinking in terms of judging is complete or essential.

Furthermore, Kant’s systematic introduction of the notion of forms of thought only makes an appearance and obtains fixed meaning in the 1787 *Critique*. It is not implausible to conjecture

discursive aspect of understanding, since the logical functions of *judgment* cannot determine the manifold in *intuition* without reference to synthesis.

³⁴¹ According to Kant’s *Logic*, “[c]ognition through concepts is called *thought (cognitio discursiva)*” (AA 9:91).

³⁴² Kant offers various characterizations of the understanding at the end of A-Deduction: “We have above explained the **understanding** in various ways – through a spontaneity of cognition (in contrast to the receptivity of the sensibility), through a faculty for thinking, or a faculty of concepts, or also of judgments” (A126).

that the notion of thinking undergoes a substantial change between the two editions. Therefore, it is suspicious whether it is proper to invoke Kant's view in 1781 to justify his view in 1787.

If thinking is not exclusively, nor even primarily, judging, then what is it? In the 1787 *Critique*, Kant has a clear-cut conception of *thinking as combining or synthesis*:

They [Categories] are only rules for an understanding whose entire capacity consists in thinking, i.e., in the action of bringing the synthesis of the manifold that is given to it in intuition from elsewhere to the unity of apperception[.]” (B145)

Kant not only characterizes the capacity of understanding as thinking, but also explicitly characterizes thinking as relating the *manifold* in intuition to the *unity* of apperception. It becomes apparent that what is essential to thinking is not whether its action is discursive (by means of concepts), but whether the action of the understanding is spontaneous. Construed in this light, some passage might look differently. When Kant says that “through which [the concept] an object is thought at all (the category)” (B146), what Kant has in mind is not to subsume an object under a concept, but to combine the manifold in a concept of an object (category). The reading of thinking as pre-discursive synthesis, rather than discursive thought, is consistent with my previous view that for Kant synthesis is the primary function of human understanding.³⁴³

9.4 The Project of Argument and Perception Premises

9.4.1 Preliminaries

Now let's turn to Kant's argument from perception in the B-Deduction. As I have reconstructed, the argument from perception is quite lengthy and complex. As Kant's final argument, it draws on groups of premises: Perception Premises, Space-time Premises, Synthesis Premises, and Categories Premises. They are divided in terms of the functions they perform to meet the requirements of the aim of the Transcendental Deduction that categories are *a priori* valid of objects. In what follows I will offer a brief analysis.

First of all, the Perception Premises (AP1) and (AP2) are introduced as meeting the requirement of *reality* to guarantee the scope of the application of categories. In § 22 Kant writes: “Consequently the categories do not afford us cognition of things by means of intuition except

³⁴³ See Chapter 5.

through their possible application to empirical intuition, i.e., they serve only for the possibility of empirical cognition. This, however, is called experience. The categories consequently have no other use for the cognition of things except insofar as these are taken as objects of possible experience.” (B147-B148)

Second, the Space-time Premises are aimed at introducing the synthetic unity into the argument. As a routine, Kant will take some synthetic unity given *a priori* as the entrance to the argument. Then the ensuing argument follows the same pattern: where there is unity, there is synthesis and thereby there are categories.³⁴⁴ In the master argument in Chapter 7, the entrance is the identity of self-consciousness. In the easy argument in Chapter 8, the entrance is the analytic unity of synthetic judgment. Now in the final argument discussed in this Chapter, the entrance to the argument is the singularity of space and time. Although Kant introduces synthetic unity, he does not invoke the identity of self-consciousness. As it has been stressed, the identity of self-consciousness is merely one way, far from the only way, to the entrance of synthetic unity.

Third, the Categories Premises serve to introduce categories into the argument. It is in the very final stage that the results in the first step of the B-Deduction are incorporated into the second step. In order to establish the link between transcendental imagination and categories by modeling on the link between the synthesis of understanding and the forms of thought. Therefore, the two steps are much looser than one might expect, since their link is not established by a deductive inference, but by an inference by analogy.

The final argument from perception in §26 exhibits a striking synthetic character in method. With introducing these three groups of premises, the sensible condition and the intellectual condition are considered and studied separately in Aesthetic and the first part of the Transcendental Deduction as well as Metaphysical Deduction. Kant synthesized these previous lines of thoughts into one whole.

Finally, I would like to remind the readers of the peculiar route of the argument Kant adopts for the objective reality of categories. At the end of §26, Kant writes:

Consequently all synthesis, through which even perception itself becomes possible, stands under the categories, and since experience is cognition through connected perceptions, the categories are conditions of the possibility of experience, and are thus also valid *a priori* of all objects of experience. (B161)

³⁴⁴ In the Introduction, I have proposed that all Kant’s arguments follow this suit.

Kant arrives at the conclusion that perception is conditioned by categories. According to the definition of experience, perception is presupposed by experience. Then, Kant infers to the claim that categories are also the conditions of experience. Kant's line of reasoning is interesting. In conjunction with the definition of experience, Kant infers from a strong claim that categories are conditions of perception to a weak claim that categories are the conditions of perception. In other words, it is not the case that Kant first argues for a weak conclusion by an easy argument, and then makes a further argument for a new strong conclusion *on the basis* of this old weak conclusion. Rather, Kant takes a difficult path by arguing first for a strong conclusion, and then he draws a weak conclusion through a trivial inference.³⁴⁵

9.4.2 The Perception Premises

(a) Domain

Kant's option of perception as his point of departure is not a coincidence. Rather, it is required by his official claim of the aim of the second half of the B-Deduction; As Kant writes, "the possibility of cognizing *a priori* **through categories** whatever objects **may come before our senses**... is to be explained." (B159) As Kant makes clear, the domain is targeted at "everything that may ever come before our senses" (B160). The key to this problem is to note that for Kant "whatever objects **may come before our senses**" are co-extensive with the objects of perception.

In § 26, perception is explicitly defined as "empirical consciousness of it [the composition of the manifold in an empirical intuition] (as appearance)" (B160)

The first thing that is given to us is appearance, which, if it is combined with consciousness, is called perception (without the relation to an at least possible consciousness appearance could never become an object of cognition for us, and would therefore be nothing for us, and since it has no objective reality in itself and exists only in cognition it would be nothing at all). (A120)

In other places Kant's remarks are even apter:

³⁴⁵ The conclusion that categories are necessary for perception seems so strong that many commentators take it as one of most decisive support to the conceptualist reading of Kant. As McLear points out, it is one of most important texts for conceptualist reading. See McLear 2014.

Sense represents the appearances empirically in **perception**[.] (A115)

Now since all possible perception depends on the synthesis of apprehension, but the latter itself, this empirical synthesis, depends on the transcendental one, thus on the categories, all possible perceptions, *hence* everything that can ever reach empirical consciousness, i.e., all appearances of nature, as far as their combination is concerned, stand under the categories[.] (B164-B165)

Since the objects of perception and the objects before our senses are coextensive, then it is no wonder that if all objects of perception are conditioned by categories, then “whatever objects may come before our senses” are also conditioned by categories.

(b) Comparison with Argument from Cognition

Since this argument starts with Kant’s conception of perception, it is reminiscent of Kant’s so-called “argument from below” discussed in Chapter 6. As I have shown, the argument from below seems to start with the weak premise that is centered on Kant’s conception of perception, which betrays some anti-skeptical promise. On my abductive analysis of the text, however, it turns out that what is at play is a strong conception of *cognition*, the conscious representation to object. With the unfolding of the argument, a variety of component requirements are involved.

In contrast, the argument from perception in § 26 does not presuppose a strong conception of cognition or anything like that. To be sure, Kant introduces the space and time as a condition of perception in the ensuing argument. To explore the condition of some kind of representation is a common practice in Kant’s transcendental philosophy. Kant’s move of exploiting the argumentative potential of perception is only a practice of this general principle. As Kant himself intends, the condition of space and form *flows from* perception and its condition, rather than from something else. At any rate, Kant does not *implicitly replace* the weak premise of perception with a strong premise of cognition. Even if there is something with which Kant potential opponents would disagree, in my view, it is not with how Kant introduces the condition of the form of intuition, but with his introduction of the *unity* of formal intuition.

Kant further argues that “by the **synthesis of apprehension** I understand the composition of the manifold in an empirical intuition, through which perception” (B161). I believe that in this very step Kant’s inference from perception to the synthesis of apprehension is driven by the *same* motivation of the radical manifoldness in his apprehension argument in the argument from

cognition. Only from the next move onward, the salient difference between these two arguments can be revealed.³⁴⁶

9.5 The Space-time Premises: A New Entrance to Synthetic Unity

9.5.1 From Apprehension to The Forms of Intuition

In his first argument from cognition, Kant infers from the synthesis of apprehension to the *synthesis of reproduction*, for the former by itself falls short of satisfying some requirement of *cognition*. In this final argument from perception, by contrast, Kant makes a decisively different move from that in the argument from cognition by introducing the space and time, the argument thus runs into a quite different direction. Since the manifold appearances are in space and time, and space and time are the forms of our intuition, Kant takes a seemingly uncontroversial step to infer that the synthesis of apprehension is conditioned by space and time.

The introduction of space and time brings Kant in a position to exploit the theoretical potential of space and time, just as he does when he introduces the identity of self-consciousness. Kant writes that “space and time are represented *a priori* not merely as **forms** of sensible intuition, but also as **intuitions** themselves (which contain a manifold), and *thus with* the determination of the **unity** of this manifold in them (see the ‘Transcendental Aesthetic’)” (B160-B161). Kant employs the explicit technical device to mark the three claims standing in two inferential relations:

(ST1) Space and time are represented *a priori* as the **forms** of sensible intuition.

(ST2) Space and time are represented *a priori* as **intuitions** themselves.

(ST3) Space and time are represented *a priori* with the **unity** of this manifold in them. (from (ST 2))

Kant clarifies the twofold character of space and time further in the footnote by introducing the distinction between the *form of intuition* and *formal intuition*:

Space, represented as **object** (as is really required in geometry), contains more than the mere form of intuition, namely the **comprehension** (*Zusammenfassung*) of the manifold given in accordance with the

³⁴⁶ As I have noted in Chapter 6, the peculiarity of the argument is that reproduction and association that are supposed to be inextricably entwined with apprehension are *not* taken into the argument. See Chapter 6 for my explanation.

form of sensibility in an **intuitive** representation, so that the **form of intuition** merely gives the manifold, but the **formal intuition** gives unity of the representation. (B160f-Bf161f)

Kant draws the distinction between the form of intuition and the formal intuition, which is absent in Aesthetic. Then, what is the difference between the form of intuition and formal intuitions? Their essential difference, according to Kant, is that “the **form of intuition** merely gives the manifold, but the **formal intuition** gives unity of the representation”.³⁴⁷ On the one hand, Kant claims that (T1) “space and time are represented *a priori* as **intuitions** themselves (which *contain* a manifold)”. On the other hand, Kant claims that (T2) “the **form of intuition** merely *gives* the manifold”. Both the form of intuition and the formal intuition have something to do with the manifold.

This initial similarity should not obscure the difference in the relation of the form of intuition and the formal intuition to the manifold. Kant’s formulations are very careful: the form of intuition *gives* manifold, whereas the formal intuition *contains* manifold. Their difference is not verbal, but substantial. To say that the form of intuition *gives* manifold is to say that it *grounds* mereological property. Since *form does not have a part*, it does not contain manifold within it. In other words, the form does not have mereological property. In virtue of space as a form of intuition we “represent them as outside <and next to> one another, thus not merely as different but as in different places” (A23/B38). Space renders the sensations manifold and discrete in space.

To say that formal intuition itself *contains* manifold is to say that it *instantiates* mereological property. Since only an individual object can instantiate property, it implies that space is a thing, i.e., an object of representation, rather than a way of representation. The pure manifold given, or made possible, by the form of intuition is nothing other than the manifold contained by the formal intuition.

9.5.2 Reference to the Transcendental Aesthetic

Unfortunately, Kant does not draw the terminological distinction between the form of intuition and the formal intuition in the Transcendental Aesthetic as he does in §26 and its footnote.³⁴⁸ It does not imply that the idea of formal intuition is utterly novel and it does not appear

³⁴⁷ This distinction is a parallel to the distinction between indeterminate intuition and determinate intuition, or intuition as the component of cognition and intuition as species of cognition, which I have elaborated in previous chapters.

³⁴⁸ Since Kant explicitly equates the form of intuition with the pure intuition, the pure intuition in Aesthetic and the formal intuition in B-Deduction are not identical.

until the second edition of the *Critique*. I believe that Kant's conception of formal intuition has already played an essential role in both editions of the Metaphysical Exposition. For illustrative purpose, in the following I will only address Kant's four space-arguments in the Metaphysical Exposition in the 1787 *Critique*. Kant's merely introducing the distinction in Deduction is nothing other than a clarification of a previous ambiguity, it does not add anything new.

In the Metaphysical Exposition, the two arguments for apriority can be seen as arguing for space to be the form of intuition, and the two arguments for singularity can be seen as arguing for space to be the formal intuition. The arguments for the apriority of space focus on the relation between space and extended bodies and concludes that space is the condition of extended bodies, which means nothing but that space is *the form of intuition*. The arguments for the singularity of space focus on the relation between space and the manifold in it, which suggests that space is of unity, and space is the formal intuition.

In Chapter 8 I have argued that Kant has two different conceptions of intuition.³⁴⁹ Now I would like to propose that they are respectively operative in the apriority arguments and in the singularity arguments in the Aesthetic. We must be clear what conception of intuition underlies the latter two space-arguments. According to Kant, intuitions are singular representations. In his attempt to prove that space is intuition, Kant is trying to argue for the *singularity* of the representation of space.³⁵⁰ With this aim, what Kant has in mind is the unity conception intuition, rather than the manifold conception of intuition. According to this full-blown unity conception, intuition is a species, of which cognition is a genus. It is not an ingredient of cognition.³⁵¹ When this unity conception of intuition is applied to space, then it is nothing other than the *formal intuition*.

9.5.3 The Singularity of Space

The question of whether Kant's claim that space is the formal intuition with unity can be answered by appealing to the Metaphysical Exposition, where Kant provides two arguments for the singularity of space. Before entering the arguments, I would like to have a general evaluation of Kant's singularity argument in the Aesthetic. The following discussion is not meant to be a conclusive analysis of Kant's arguments. Rather, it merely takes into account those aspects relevant to and even paralleled with my previous analysis such as Kant's notion 'I' (e.g. the singular discourse and the distinction between analytic unity and synthetic unity). On my reading, Kant is not always

³⁴⁹ See Wilfred Sellars 1968.

³⁵⁰ Faulkenstein (2000) argues that the intuition in singularity arguments is merely a historical relic of Kant's conception of intuition in Inaugural Dissertation.

³⁵¹ In the singularity arguments, space is not a way of representation; it is instead the object of representation.

careful to distinguish *space as representation* from *the representation of space*. This is not an accident, since for Kant space itself is a representation. The representation of space is a *concept* of representation. Here the concept is not used in a characteristic Kantian technical sense, otherwise it commits us to the view that space is a concept, which is precisely rejected by Kant. Rather, the concept is used in an ordinary sense, and it is similar to the notion ‘term’ in logic and the philosophy of language. On my reading, Kant’s two lines of arguments for the singularity of space both entwine these the *semantic* property of the *notion of space* and the *mereological* property of *space itself* together.

(a) First Argument

Kant’s first argument for the singularity of space reads as follows:

Space is not a discursive or, as is said, general concept of relations of things in general, but a pure intuition. (T1) For, first, one can only represent a single space, and if one speaks of many spaces, one understands by that only parts of one and the same unique space. (T2) And these parts cannot as it were precede the single all-encompassing space as its components (from which its composition would be possible), but rather are only thought **in it**. (T3) It is essentially single; the manifold in it, thus also the general concept of spaces in general, rests merely on limitations. From this it follows that in respect to it an *a priori* intuition (which is not empirical) grounds all concepts of it. (A24-25/B39)

I propose a semantic reading of the first part (T1) in this argument, and I believe that Kant is arguing for the referential singularity of the concept ‘space’. Kant contends that the concept ‘space’ refers to one single object space, rather than to a plurality of spaces. Nonetheless, in practice we do use the plural form ‘spaces’, which seems to suggest that there are more than one spaces. Kant argues, however, that is not the case: the concept in the plural form does not refer to the existence of many spaces; rather, it is taken as referring to the *parts of* a single space. The ordinary discourse of the plural form ‘spaces’ can be paraphrased into the discourse of singular form ‘space’. When someone says:

(1) The space in my room is smaller than the space in your room.

For Kant, the sentence should not be read literally as ontologically committed to the view that there are at least *two spaces* respectively in my room and in your room. The sentence should be paraphrased so as to eliminate the two different referents of the expression “the space in my room”

and the expression “the space in your room”. Therefore, it could instead be paraphrased with reference to the uniqueness claim of space:

(2) The part of space in my room is smaller than the part of space in your room.

In this paraphrased sentence, the plural ‘spaces’ is paraphrased away by the singular term ‘space’. As it makes clear, ‘spaces’ does not refer to more than one object; rather, it refers to *one single object* with *more than one occurrences*. In order to insist on the uniqueness claim of space, Kant introduces the mereological relationship to explain away the discourse with reference to ‘spaces’ in plural form. The ontological simplicity is saved at the cost of mereological complexity.

However, the paraphrasing at best shows that there is *one* way to make sense of our space discourses with *the ontology of one space*. That is, all of our space discourses could be *read* as ontologically committed to one single space, rather than to a plurality of spaces. It does not show that it is the *only* way to make sense of all our space-discourses, neither does it show that it is *true* that there is only one space. What it shows is rather that the single space ontology is our *best theory*. It implies that (1) should be understood literally, whereas the paraphrased (2) is redundant. Therefore, it could be argued that out of *pragmatic* reason we should ontologically commit to the one-space ontology in spite of its mereological complexity. Unfortunately, this theory-choice reading is not Kant’s view, because Kant does believe that there *is* only one space, and that it is the only correct description of the reality.

What Kant further argues in (T2) and (T3) could be viewed as an attempt to complete the argument by showing the irreducibility of different spaces into one single encompassing space. On a close reading of it, Kant merely reasserts the mereological priority of whole to part without justifying that it is the only way to understand the relationship between the whole and the parts in the case of space. One line of justification might be like this:

(1) Assuming for *reductio* that space-whole is reducible to its parts, that is, the space-whole is constructed by its parts.

(2) The reductive account of space implies the irreducible space part.

(3) However, space is infinitely divisible.

(4) The atomic space does not exist.

(5) Therefore, (1) is false, and it is concluded that the space-whole is prior to any part of it in the sense that it is not a construction from them.

According to the argument, there is only one single space, since the idea of reducing space results in the self-defeating notion of atomic space. Then, we still need an account of how the space parts are possible. Kant gives an account that the manifold parts of space are merely the *limitations* of it. Therefore, the whole-priority account of space is better than the part-priority account of space since the former explains not only what the latter fails to explain, but also what the latter can explain.

(b) Second Argument

In the 1787 *Critique* Kant rewrites the second argument for the singularity of space:

Space is represented as an infinite **given** magnitude. Now one must, to be sure, think of every concept as a representation that is contained in an infinite set of different possible representations (as their common mark), which thus contains these **under itself**; but no concept, as such, can be thought as if it contained an infinite set of representations **within itself**. Nevertheless, space is so thought (for all the parts of space, even to infinity, are simultaneous). Therefore, the original representation of space is an **a priori intuition**, not a **concept**. (B39-40)

In this second argument, Kant intends to first employ the crucial distinction between “contained **under**” (equivalently, “contained in”) and “contained **within**” to establish a general criterion that can differentiate concept from intuition, and then argues that by the criterion the term ‘space’ is not a concept but an intuition. The outline of the argument goes as follows:

(1) A representation r is a concept if and only if r is contained in an infinite set of different possible representations, and r does not contain infinitely many representations within itself.

(2) Space contains infinitely many representations within itself.

(3) Space is not a concept.

(4) Space is an intuition

The basic idea of the argument is quite clear, and the most important of the argument step is (1). It is noteworthy that Kant offers two criteria to specify what it is to be a concept. As Kant conceives, the distinction between “contained under” and “contained within” is mutually exclusive and jointly exhaustive. In the 1787 *Critique*, Kant confers so much hope on this distinction to elucidate the essential difference between intuition and concept by discussing it at least three times. Except in the Transcendental Aesthetic, Kant alludes to it in the footnote to §17:

Space and time and all their parts are **intuitions**, thus individual representations along with the manifold that they *contain in* themselves (see the Transcendental Aesthetic), thus they are not mere concepts by means of which the same consciousness is *contained* in many representations, but rather are many representations that are *contained in* one and in the consciousness of it; they are thus found to be composite, and consequently the unity of consciousness, as **synthetic** and yet as original, is to be found in them. This **singularity** of theirs is important in its application (see § 25). (B136f)

Kant also mentions it in the footnote of §26, which is the starting point of our present discussion: “[s]pace [...] contains [...] the **comprehension** of the manifold [*given in accordance with the form of sensibility*] in an intuitive representation” (B160f).³⁵²

The distinction between ‘containment under’ and that of ‘containment within’ are as clear as they initially appear. On the one hand, Kant’s explicit discussion of the notion of ‘containment under’ is included in his discussion of the content (*Inhalt*) and the scope (*Umfang*) of concept in his *Logic*, where it forms a contrast with “contained in”. In §7 of the *Logic* titled “*Content and scope of concepts*”, Kant writes:

Every concept, as *partial concept*, is contained in the representation of things; as *ground of cognition*, i.e., as *mark*, these things are contained *under* it. In the former respect every concept has a *content*, in the other a *scope*. (AA 9:95)

As indicated in *Logic*, both ‘containment under’ and ‘containment in’ are *semantic* relations between *concepts* and *things*. Kant further indicates the inverse relationship between ‘containment in’ and ‘containment under’. As Kant continues: “The content and scope of a concept stand in inverse

³⁵² Note that in the latter two cases, Kant is speaking of “contained within” when he speaks of “contained in”. I keep the loose term “contained in” for the inverse relation of “contained under”, therefore, I think that a same relation could both be specified with “contained under” and “contained in”, which will be shown in the following.

relation to one another. The more a concept contains *under* itself, namely, the less it contains *in* itself, and conversely.” (AA 9:95) Hence, Kant’s notion of “contained under” can be defined as:

For anything x and any concept C , x is contained under the concept C if and only if C is a predicate of x such that $C(x)$ is true.

In a different yet important sense, a *concept* has the analogous relation to other *concepts*. As Kant writes in §9 of the *Logic*: “Concepts are called *higher* (*conceptus superiores*) insofar as they have other concepts under themselves, which, in relation to them, are called *lower concepts*.” (AA 9:96) In §10 *Genus and species* of the *Logic*, this relation between concepts is called ‘subordination under’: “higher and lower concepts [...] are distinguished [...] only in regard to their relation to one another (*termini a quo* or *ad quod*) in logical subordination” (AA 9: 97). The idea could be illustrated as follows. The concept C_1 is contained in its conjunction with any other compatible concepts, say, $C_1 \& C_2$, $C_1 \& C_3$, $C_1 \& C_4$, and so forth. This ‘containment in’ can be spelled out by ‘*part-concept*’ relation. Since the concept C_1 can make up an infinite set of complex concepts, C_1 is a *part concept* of an infinite set of complex concepts. The distinction between partial concept and part-concept has been discussed in Chapter 8.

On the other hand, Kant discusses “contained within” in a straightforwardly *mereological* sense. Here Kant is not talking about the concept or the term ‘space’; rather, he is talking about space itself. Space as the object of representation does not have any referential force. It only has the mereological property of containing an infinite set of parts. The definition of “contained within” could be formulated as:

For any representation r and R , r is contained within R if and only if r is a mereological part of it.

Kant’s introduction of the distinction between ‘contained **under**’ and ‘contained **within**’ appears to commit him to the conflation of the semantic and the mereological level.³⁵³ When Kant speaks of ‘containment under’, he is speaking of the relation between concept and thing on the semantic level. When Kant speaks of ‘containment within’, Kant is speaking of the mereological relation between whole and part and thereby leaping onto a different mereological level. If Kant

³⁵³ One might object that what Kant focuses on is the relationship between intuition and concept with respect to infinity. So the attack on the conflation of the two levels simply misses Kant’s point.

were to contrast intuitions with concepts on the semantic level, he should have characterized intuition with the *negation* of ‘containment under’ relation: a representation *r* is intuition only if *it is not the case* that it contains an infinite set of representations under it. Kant seems to commit himself to the assumption that ‘containment under’ and the negation of ‘containment within’ are co-extensive. When Kant is talking about “containment” on two different levels, there is an intensional difference in the notion of “containment” between the two criteria.³⁵⁴ Indeed, this intensional distinction could be *coincident with* the extensional distinction, but the former does not *justify* the latter. However, I think it does not threaten Kant’s argument. Kant could justify his move by suggesting that the negation of the containment of an infinite set of *many referents* under a representation is the containment of *only one referent* under it, provided that he assumes that the representation at issue is *not empty*.

Nevertheless, the relationship between “contained under” and “contained within” is not thereby settled. Along the above line of justification, the second singularity argument only shows that the term ‘space’ is singular. It leaves it undetermined whether the referent of ‘space’ is a space-part or a space-whole. The criterion of “contained within” does not help either, since *both* space-part and space-whole contain an infinite set of representation within it. Consequently, Kant’s second argument for singularity does not show that the priority of whole to part. That the space-whole contains within itself an infinite set of representations seems to be an analytic truth that whole contains part, which holds even independently of Kant’s mereological view of the priority of whole to part. Therefore, in the second argument Kant makes an even *weaker* claim on the mereological property of space, not to mention justify it.

9.6 The Synthesis Premises: The Source of Unity and Conceptualism

In the second step of the B-Deduction, Kant does say something new concerning formal intuition. Here Kant makes an important clarification, if not a correction:

In the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it *precedes all concepts*, though to be sure it presupposes a synthesis, which does not belong to the senses but through which *all concepts of space and time* first become possible. For since through it (*as* the understanding determines the sensibility) space or time are first **given** as intuitions, the unity of this *a priori* intuition belongs to space and time, and not to the concept of the understanding (§ 24). (B160f-161f)

³⁵⁴ This intensional difference is the same with the ambiguity of “in” in the original sense of analytic unity and synthetic unity.

This latter half of the footnote arouses interpretative controversy. Kant seems to make two contradictory claims on the source of the unity of space and time at the same time:

- (1) The synthetic unity of space is ascribed to sensibility.
- (2) The synthetic unity of space is ascribed to understanding.

Most commentators believe that there is no inconsistency in this footnote by suggesting that either (1) or (2) is incorrectly attributed to Kant. Both the camp of conceptualism and non-conceptualism can find crucial support from this footnote. Initially, this footnote seems to be favorable for conceptualists. On some other reading by non-conceptualists, however, this could be turned against conceptualists.

There are two exegetical reasons for non-conceptualists to embrace (1). First, Kant says that (T1.1) “[i]n the Aesthetic I ascribed this unity merely to sensibility, only in order to note that it *precedes all concepts*”. Second, Kant claims that (T1.2) “the unity of this *a priori* intuition belongs to space and time, and *not* to the concept of the understanding”. The textual evidence for (2) is that (T2.1) “[the unity] presupposes a synthesis, which does not belong to the senses” and that (T2.2) “the understanding determines the sensibility”.

I myself believe that Kant is not guilty of inconsistency and that he makes a commitment to (2). The debate between conceptualists and non-conceptualists cannot be settled down here. In this section I will only discuss the *exegetical* evidence for conceptualist reading of this passage with reference to Kant’s strategy of abstraction and his model of mind. In particular, I will show how the two texts in support of non-conceptualism could be read otherwise.

(a) (T1.1) Explained Away

As for (T1.1), the term “concepts” in “precedes all concepts” is ambivalent. The term “concepts” could be understood in general sense. In this sense, by precedence Kant is referring to the priority of synthetic unity to analytic unity. Since the priority of synthetic unity to analytic unity has been discussed in Chapter 7, I will not discuss it here anymore. It is more plausible to believe that the term “concepts” is referring to the following “concepts of space and time”. In this sense,

by precedence Kant is referring to the mereological priority of whole to part. The expression “all *concepts* of space” is interesting. Kant does not only use concept, but he uses ‘concept’ in the plural form. Remember in Aesthetic Kant claims that “[the space] is essentially single; the manifold in it, thus also the general concept of spaces in general, rests merely on limitations” and that “if one speaks of many spaces, one understands by that only parts of one and the same unique space” (A25/B39). Obviously, the referents of the concepts are parts of one single space. In space it is the whole that makes the part possible.

In fact, the non-conceptualist conviction that unity is ascribed to the sensibility rather than to the understanding is motivated by something deeper. Non-conceptualists are committed to the assumption of the *completeness* of the Transcendental Aesthetic in one way or another. They believe that the Transcendental Aesthetic is self-contained and does not susceptible to revisions or supplements. This assumption has important consequences. First of all, non-conceptualists believe that the *Critique* proceeds in a *linear* order; the narrative order of Kant’s presentation is the logical order of Kant’s theory. Accordingly, it must be assumed that the Transcendental Analytic *presupposes* and *rests upon* the conclusion in the Transcendental Aesthetic that intuition, *by itself and independently from concepts*, presents the individual object to us. Moreover, non-conceptualists believe that if there is any tension between the Transcendental Aesthetic and the Transcendental Deduction, the move we should make is to *adapt* Kant’s doctrine of the understanding to his doctrine of the sensibility, not the vice versa. However, the idea that sensible intuition can perform cognitive function independently of concepts leaves the Transcendental Deduction unmotivated. Therefore, the non-conceptualists are eager to *reinterpret* the distinctiveness of the Transcendental Deduction by assigning a different job to it.

In order to appreciate the deeper reason why the Transcendental Aesthetic is incomplete and why the unity of space is ascribed to sensibility, one should be aware of Kant’s *analytic-synthetic method* in presenting his transcendental philosophy. With this strategy Kant *first* provides a *provisional* conclusion in the Transcendental Aesthetic and *later* draws a different but *genuine* conclusion in the Transcendental Deduction.³⁵⁵

As I have mentioned, the Metaphysical Exposition has a twofold goal: on the one hand, Kant has to show that space is *a priori* representation; on the other hand, Kant has to show that space is an intuition. Correspondent to these two goals, there are two different conceptions of intuition

³⁵⁵ Longuenesse calls it as a rereading of Aesthetic. (1998, 214-227)

operative in the Metaphysical Exposition. In particular, Kant inevitably resorts to unity to justify that space is a *singular* representation, and therefore it is intuition rather than concept.

Kant employs the strategy of abstraction respectively in the Aesthetic and the Deduction. In the Transcendental Aesthetic, the understanding is methodologically separated from the discussion. As Kant explained,

So if I *separate from* the representation of a body that which the understanding thinks about it, such as substance, force, divisibility, etc., as well as that which belongs to sensation, such as impenetrability, hardness, color, etc., something from this empirical intuition is *still left* for me, namely *extension and form*. These belong to the pure intuition, which occurs *a priori*, even without an actual object of the senses or sensation, as a mere form of sensibility in the mind. (A20-A21/B35)

Therefore, in the Transcendental Aesthetic the doctrine of the understanding has not yet been introduced and elaborated.

One might be tempted to think that it is reasonable to suppose that Kant tacitly assumes that the unity is sensible in origin, for otherwise it is difficult to explain why Kant does not make explicit in the Aesthetic that the unity of space and time is intellectual in origin, which is something quite unusual in the framework of the Aesthetic. The answer to the question is simply that given his methodological consideration, Kant is *not in a position* to give an *account* of the *source* of unity.

At any rate this is not the only place where Kant leaves his account of something in the Aesthetic to the Analytic. Kant famously does not give any account of the paradox of inner affection in the Transcendental Aesthetic. Kant introduces the problem as early as in §5 of the Transcendental Aesthetic, but Kant does not have resources to cope with the problem there. The solution to the puzzle is put forward as late as in the latter half of the Transcendental Deduction; in §24 Kant admits “[*h*]ere is now the place to make intelligible the paradox... how this presents even ourselves to consciousness only as we appear to ourselves, not as we are in ourselves, since we intuit ourselves only as we are internally **affected**”. (B152-153)

I believe that the non-conceptualist reading simply misses Kant’s radically novel idea in his revolutionary theory of mind in history. According to the Platonic tradition, the distinction between the sensibility and the understanding is drawn in terms of the fact that two faculties have distinct domains of objects. Their different respective functions can be explicable either directly in terms

of the different domains *of objects*,³⁵⁶ or indirectly in terms of *different phenomenal qualities of knowing*, which in turn can be further explicable in terms of the different domains of the objects.

Early modern philosophers take over the general picture of making distinctions in cognitive faculties. For Descartes, our pure intellect perceives size, shape, motion, etc., which are the primary qualities amenable to mathematical description, whereas our sense perceives color, smell, taste, etc., which are the secondary qualities unamenable to mathematical description. For Leibniz, the distinction between the sensibility and the understanding is of merely quantitative difference. Sensibility is capable of obscure and confused cognition, while the understanding is capable of clear and distinct cognition. The pre-critical Kant even revives the Platonic distinction: the sensibility provides us with the sensible cognition of phenomena, while the intellect provides us with the intellectual cognition of noumena.³⁵⁷

In reaction to the Platonic tradition, the critical Kant radically transforms the landscape of the *individuation conditions* of the sensibility and the understanding. In the critical period the understanding is defined as the spontaneous faculty of which spontaneity is its essential property, and the sensibility is defined as the receptive faculty of which receptivity is its essential property. The Kantian distinction between the sensibility and the understanding is drawn not due to that they have *distinct domains of the objects of cognition*, but due to that they play *distinct yet complementary roles in forming any kind of the cognition of the object*. For Kant, our cognition is primarily conceived as a synthetic unity of manifold representations in one intuition. It does not mean that there is the faculty of cognition. The notion of cognition requires further analysis. By analysis we find that, say, the element of “the manifold” cannot be reduced into the element of “the unity”, and vice versa. And then we conclude there must be two distinct faculties responsible for these two elements in cognition, and so on and so forth.

Therefore, Kant’s distinctive model of mind marks a fundamental departure from the Cartesian model of the human mind. A faculty is postulated not as a result of the existence of some kind of cognition. Rather, a faculty is postulated as a result of *the analysis of the elements of cognition*. The sensibility and the understanding provide *irreducible elements* of cognition. As Kant suggests, we should pursue the path of “seeking two entirely different *sources* of representation in the

³⁵⁶ It could be two realities or two aspects of one same reality.

³⁵⁷ In this picture, the place of empirical concepts is insignificant, since they only serve as ectypes *derived* from perception and do not *expand* our knowledge in virtue of expanding the domain of knowledge.

understanding and the sensibility, which could judge about things with objective validity **only in conjunction**” (A271/B327).³⁵⁸

(b) (T1.2) Explained Away

The second exegetical reason for non-conceptualist reading lies in Kant’s claim (T1.2) that “the unity of this *a priori* intuition belongs to space and time, and *not* to the concept of the understanding”. Initially, Kant appears to suggest that the synthetic unity of space is not a product of the operation of understanding. Contrary to this initial impression, however, it is critically important to appreciate the meaning of “belong to”. In this context, I suggest that by “belong to” Kant understands the instantiation of property. If a property F belongs to an object x, x instantiates F. Intuitively, x’s *instantiation* of a property F is different from y’s *causation* of the property F. The property F can be instantiated by one thing, but caused by another thing. If I get a burning, I could say that I have a burning or I instantiate a burning. It does not imply that it is not the sun, fire, or something else that causes the burning. When Kant says that unity belongs to space, Kant is saying that space instantiates the property of unity. From this it does not follow that Kant is implying that the instantiation of the property of unity is an unexplained brute fact, nor does it not imply that the unity is grounded in the sensibility.

We might have a better understanding of Kant’s claim by considering his own reason to say so. Kant makes such a move precisely because “through it (as the understanding determines the sensibility) space or time are first **given** as intuitions”. This sentence can be understood as follows: by some *determining ground* space and time first instantiate certain *determinations* such as to be classified into certain kind of entity. While Kant technically emphasizes “given”, on my understanding the emphasis should be attached to “*as intuitions*”. It is this unity that qualifies space and time to be intuitions as genuine immediate and singular representations. This can be regarded as a clarification of the conception of intuition that underlies the singularity of arguments.

In fact, Kant offers two alternatives: one is “space and time”, the other is “the concept of understanding”. As far as the possibility of human cognition is concerned, our pure representations can only be divided into these two kinds. Both pure intuitions and pure concepts instantiate the property of unity.³⁵⁹ Now Kant intends to answer the question of what kind of pure representation

³⁵⁸ Kant’s rejection of resemblance thesis is also evidence by the following passage: “All intuitions, as sensible, rest on affections, concepts therefore on functions. By a function, however, I understand the unity of the action of ordering different representations under a common one.” (A68/B93)

³⁵⁹ See Chapter 7 and Chapter 8.

this synthetic unity should be attached to. What Kant stresses is that the synthetic unity at stake is displayed on the intuitive level, rather than on the conceptual level. As I have argued in Chapter 7, the synthetic unity of space is the unity that is *in reality*, not *in thought*.

(c) The Unity of Synthesis and the Synthesis of Apprehension.

Now let's turn to Kant's inference to link the unity of space and time to the synthesis of apprehension, which is encapsulated in the following compact sentence: "even **unity of the synthesis** of the manifold... is already given *a priori*, along with (not in) these intuitions, as condition of the synthesis of all apprehension" (B161). Here Kant claims that the synthesis of apprehension is conditioned by the unity of the synthesis of space and time. This compact sentence is comprised of the following train of thoughts: (1) The unity of synthesis is given *a priori*; (2) The unity is given as a fact; (3) The unity presupposes a synthesis of understanding; (4) The combination of everything in space and time is given *a priori*; (5) The synthesis of the apprehension of conditioned by the synthesis.

9.7 The Categories Premises: Identity or Analogy?

With the development of his argument, Kant writes that "this synthetic unity can be none other than that of the combination of the manifold of a given **intuition in general** in an original consciousness, in agreement with the categories, only applied to our **sensible intuition**" (B161). This sentence is precisely the place where the conclusion of the first step is involved in, and it becomes more apparent when we see the underlining of both "**intuition in general**" and "**sensible intuition**". It is also precisely the place where the link between two steps of the B-Deduction is established by the phrase "be none other than". It is also the very place where the synthetic character of Kant's method in the B-Deduction exhibits.

The question now is what precisely the relation between the two kinds of unity or what the "be none other than" in quotation precisely means. The verb "be" in quotation could be read differently: it can be read as the is of identity, and it can also be read as the is of predication. Based on this ambiguity, Kant is either suggesting that the unity of space and time *is identical with* the unity of intuition in general, or he is suggesting that the former *is a species of* the latter. In fact, the conspicuous expression "be none other than" does not only unmistakably emphasize the crucial link between two steps, but also easily gives readers the impression that Kant appears to *identify* the unity of space and time with the unity of intuition in general. And meanwhile the predicative use

of “be” does not make sense in this context. Consequently, it is tempting to conclude that the two kinds of unity are identical.

If my previous proposal of the structure of the B-Deduction is correct, however, this cannot be the case. As I have suggested, intuition in general is abstracted intuition that is thinkable yet uninstantiable. The unity of abstracted intuition cannot be instantiated, either. The unity of space and time is “given *a priori*” and instantiated in the sensible world; in fact, they are not only instantiated, but also as the condition of the instantiation of objects. Therefore, the two kinds of unity cannot be numerically identical. In the same vein, the unity of our sensible intuition is not a species of the unity of intuition in general as a genus.

The serious consequence of the denial of these two possibilities is that the supposed link between the first step and the second step breaks off. On the one hand, the first part seems to play no argumentative role in the second part of the B-Deduction. Although on my reading Kant circumvents the triviality in a twofold sense, it meanwhile eliminates the possibility of deductive inference altogether. On the other hand, the second part seems to offer no adequate justification for the inference to categories. The B-Deduction also commits the old sin of establishing a convincing connection between the synthesis of transcendental imagination and categories.

In order to save Kant’s claim on identity, we could interpret the identity differently. As far as the *source of unity* is concerned, the unity of space and time and the unity of the manifold of intuition in general are identical. On this *origin-identity* reading, Kant is committed to the assumption that any synthetic unity is originated from the understanding. In order for this rejoinder to be tenable, the significance of the first step is to make the following two claims. (1) Any unity is intellectual in origin. (2) Any unity implies the application of categories. The essence of the move is nothing but to postulate a higher unity as the genus under which both the unity of space and time and the unity of abstracted intuition as species can fall.

How should we understand this crucial “be”? I propose that the “be” should not be taken literally as “be” of identity or “be” of subsumption. What Kant makes here by identification is not a deductive inference, but an inductive inference, namely, it is an *inference by analogy*. Kant does not infer from a claim on a genus to the claim on a species of the genus. Rather, he infers from one species to another species.

Of course, the inference by analogy falls short of logical validity. But the deductive reasoning is not the only way that makes the argument convincing. In fact, many good arguments make use of inference by analogy as the way out of thorny philosophical problems, among which one of the

most notable is the argument for the existence of other's mind. Here I will not burden myself with justifying the argumentative utility of inference by analogy. The case I would like to make is that, contrary to the literal meaning of the text and readers' initial impression, the best way to make sense of Kant's reasoning here is to attribute to him an inference by analogy to link the two kinds of unity in particular and the two steps of the proof in general.

On my reading, the first step establishes a *model of the discursive understanding* for the second step. It surveys the nature and the working of discursive thought under a simplified ideal condition which cannot possibly be met in reality. For any discursive mind, there must be the manifold given in intuition on the one hand and the unity of apperception on the other hand. The model of the discursive understanding is only an *ens rationis* that can never be instantiated. It is a model not in the sense of *generality*; what is true of the model is also true of all the instances of the model. Rather, it is a model in the sense of *paradigm*; all the instances of the model must realize it in different ways without being identical with it.

Conclusion

According to one popular narrative, Kant's system is a synthesis of empiricism and rationalism. Kant criticizes the bad, yet incorporates the good into his own system. By reconstructing Kant's philosophical spectrum, we come to see how crude this popular picture is. On the one hand, Kant's system is by no means a reaction merely to *empiricism* and *rationalism* since Kant is making responses to a surprisingly wide range of systems; on the other hand, it is less a *synthesis* of the previous systems since Kant decisively distances himself from all his predecessors.

Underlying Kant's philosophical spectrum is the leading question of the ground of the relation of the representation to the object, which assumes the absolutely central place in Kant's vision of metaphysics. On the one hand, Kant is convinced that every metaphysical system must assume some kind of the grounding model, which determines the promise of their projects. On the other hand, Kant believes that every difficult metaphysical question has a bearing upon this grounding model, and that the fixing of this model helps in resolving other metaphysical problems.

I see Kant primarily as an Enlightenment philosopher. Kant's main philosophical and scientific interests were shaped in the Enlightenment, in which the repercussions of the scientific revolution can even be felt and the eager to ground or to emulate science is widely shared. Kant made dialogues with most of his preeminent predecessors and contemporaries: Descartes, Malebranche, Locke, Leibniz, Berkeley, Wolff, and Hume, for they share a basically same context.

When Kant outlived both his contemporaries and the Age of Reason, he lost his interlocutors and entered into a new era: the Age of Revolution. It is no wonder that the context in which the *Critique* is read underwent dramatic transformations, and the reception of the question of the grounding relation of representation to object finally ran in a direction that is neither intended nor expected by Kant. While the younger idealist philosophers were enthusiastic in drawing on Kant, they had their own preoccupations and projects. Finally, the results of the critical philosophy were retained, while motivations of critical philosophy were forgotten.

It seems that we cannot be sympathetic to Kant's project without retrospecting its past. While Kant's commitments to explanatory rationalism, causal realism, and epistemic atheism are taken as assumptions without proof, they are not drawn out of the air. Rather, they have their seeds in Kant's pre-critical philosophy. Furthermore, Kant seems to never give up the idea that there are irreducible real relations in the world, and the ground of the real relations is something outside the world. In addition, Kant's new grounding model of representations seems to be nothing other than a critical substitute for his dogmatic idea of God as the ultimate ground. In order to understand

Kant, we must not look forward to grasp the *spirit* of the critical philosophy in its idealistic future, but look backward to discover the *root* of in its dogmatic past.

Bibliography

Primary Literature on Kant

Kant, I. (1902-). *Kants gesammelte Schriften*. (Vols. 1-29). Berlin-Brandenburg (formerly: Royal Prussian) Academy of Sciences (Ed.). Berlin: Walter de Gruyter.

Kant, I. (1992a). *Theoretical Philosophy, 1775-1770*. (D. Walford & R. Meerbote, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (1992b). *Lectures on Logic*. (J. M. Young, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (1996). *Practical Philosophy*. (M. J. Gregor, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (1997). *Lectures on Metaphysics*. (K. Ameriks & S. Naragon, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (1998). *Critique of Pure Reason*. (P. Guyer & A. Wood, Trans. and Ed.). Cambridge: Cambridge UP.

Kant, I. (1999). *Correspondence*. (A. Zweig, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (2002). *Theoretical Philosophy after 1781*. (H. Allison & P. Heath, Trans. and Ed.). Cambridge: Cambridge University Press.

Kant, I. (2007). *Anthropology, History, and Education* (G. Zöllner & R. B. Louden Trans. and Ed.). Cambridge: Cambridge University Press.

Primary Literature on Others

Descartes, R. (1984). *The Philosophical Writings of Descartes: Volume 2*. (J. Cottingham, R. Stoothoff, & D. Murdoch, Trans. and Ed.). Cambridge: Cambridge University Press.

Descartes, R. (1991). *The Philosophical Writings of Descartes: The Correspondence*. (J. Cottingham, R. Stoothoff, & D. Murdoch, Trans. and Ed.). Cambridge: Cambridge University Press.

Hume, D. (1999). *An Enquiry concerning Human Understanding*, (T. L. Beauchamp Trans), Oxford Philosophical Texts, Oxford: Oxford University Press.

Leibniz G.W. (1989). *Philosophical Essays*. (R. Ariew & D. Garber, Trans. and Ed.). Indianapolis: Hackett.

Leibniz G.W. (1996). *New Essays on Human Understanding*. (P. Remnant & J. Bennett, Trans. and Ed.). Cambridge: Cambridge University Press.

Leibniz G.W. and Arnauld, A. (1967) *The Leibniz-Arnauld Correspondence* (H.T. Mason Trans. and Ed.) Manchester: Manchester University Press.

Watkins, Eric, ed. *Kant's Critique of Pure Reason: Background Source Materials*. Cambridge University Press, 2009.

Secondary Literature

Adams, R.M. (1994). *Leibniz: Determinist, Idealist, Theist*. New York: Oxford UP, 1994.

Allais, L. (2007). Kant's idealism and the secondary quality analogy. *Journal of the History of Philosophy*, 45(3), 459-484.

Allais, L. (2010). Transcendental idealism and the transcendental deduction. In *Kant's Idealism* (pp. 91-107). Springer, Dordrecht.

Allais, L. (2015). *Manifest Reality: Kant's Idealism and his Realism*. OUP Oxford.

Allison, H. E. (2004). *Kant's Transcendental Idealism*. Yale University Press.

Allison, H. E. (2015). *Kant's Transcendental Deduction: An Analytical-Historical Commentary*. OUP Oxford.

Ameriks, K. (1978). Kant's transcendental deduction as a regressive argument. *Kant-Studien*, 69(1-4), 273-287.

Ameriks, K. (2000). *Kant's Theory of Mind: An Analysis of the Paralogisms of Pure Reason*. Oxford University Press.

Anderson, R. L. (2015). *The Poverty of Conceptual truth: Kant's Analytic/Synthetic Distinction and the Limits of Metaphysics*. Oxford University Press, USA.

Barker, M. (2001). The proof structure of Kant's A-deduction. *Kant Studien*, 92(3), 259-282.

- Baum, M. (1986). *Deduction und Beweis in Kant's Transzendental-Philosophie*, Königstein: Athenäum Verlag.
- Bealer, G. (2002). Modal Epistemology and the Rationalist Renaissance. In Gendler, T. S., & Hawthorne, J. (Eds.). *Conceivability and Possibility*. Oxford University Press.
- Beck, L. W. (1978). Did the Sage of Königsberg have no Dreams?. *Essays on Kant and Hume*, 38-60.
- Beiser, F. C. (2009). *German Idealism*. Harvard University Press.
- Benacerraf, P. (1973). Mathematical truth. *The Journal of Philosophy*, 70(19), 661-679.
- Bennett, J. (1984). *A Study of Spinoza's Ethics*. [Indianapolis] : Hackett.
- Bennett, J. (1966). *Kant's Analytic*. Cambridge University Press.
- BonJour, L. (1998). *In Defense of Pure Reason: A Rationalist Account of A Priori Justification*. Cambridge University Press.
- BonJour, L. (2009). *Epistemology: Classic Problems and Contemporary Responses*. Rowman & Littlefield Publishers.
- Carl, W. (1989a). Der schweigende Kant. *Die Entwürfe zu einer Deduktion der Kategorien vor 1781*. Göttingen: Vandenhoeck & Ruprecht.
- Carl, W. (1989b). Kant's First Draft of the Deduction of the Categories. In E. Förster. (Ed.). *Kant's Transcendental Deductions*. Stanford: Stanford University Press.
- Carl, W. (1992). Die transzendente Deduktion der Kategorien in der ersten Auflage der Kritik der reinen Vernunft Ein Kommentar. Frankfurt/M. (Klostermann)
- Cassam, Q. (2007). *The Possibility of Knowledge*. Oxford University Press.
- Cassam, Q. (2008). Reply to Longuenesse. *Philosophy and Phenomenological Research*, 77(2), 525-531.
- Casullo, A. (2003). *A Priori Justification*. Oxford University Press.
- Chignell, A. (2007). Belief in Kant. *The Philosophical Review*, 116(3), 323-360.
- Chignell, A., & Pereboom, D. (2010). Kant's Theory of Causation and Its Eighteenth-Century German Background: Eric Watkins (ed. and Trans.), Kant's "Critique of Pure Reason": Background Source Materials and Eric Watkins, Kant and the Metaphysics of Causality. *Philosophical Review*, 119(4), 565-591.

- Chisholm, R. M. (1982). *The Foundations of Knowing*. University of Minnesota Press.
- Chisholm, R. M. (1989). *Theory of Knowledge*. 3rd. Englewood Cliffs, NJ: Prentice-Hall.
- Craig, E. (1996). *The Mind of God and the Works of Man*. Oxford University Press.
- Dickerson, A. B. (2003). *Kant on Representation and Objectivity*. Cambridge University Press.
- Edgar, S. (2010). The explanatory structure of the transcendental deduction and a cognitive interpretation of the first critique. *Canadian Journal of Philosophy*, 40(2), 285-314.
- Engstrom, S. P. (1994). The transcendental deduction and skepticism. *Journal of the History of Philosophy*, 32(3), 359-380.
- Falkenstein, L. (2004). *Kant's Intuitionism: A Commentary on the Transcendental Aesthetic*. University of Toronto Press.
- Forster, M. N. (2010). *Kant and Skepticism*. Princeton University Press.
- Förster, E. (2012). *The Twenty-Five Years of Philosophy*. Harvard University Press.
- Goldschmidt, T., & Pearce, K. L. (Ed.). (2017). *Idealism: New Essays in Metaphysics*. Oxford University Press.
- Gomes, A. (2010). Is Kant's Transcendental Deduction of the Categories Fit for Purpose?. *Kantian Review*, 15(2), 118-137.
- Gomes, A. (2013). Kant on Perception: Naive Realism, Non-Conceptualism, and the B-Deduction. *The Philosophical Quarterly*, 64(254), 1-19.
- Griffith, A. M. (2012). Perception and the categories: A conceptualist reading of Kant's Critique of Pure Reason. *European Journal of Philosophy*, 20(2), 193-222.
- Grüne, S. (2009). *Blinde Anschauung: Die Rolle von Begriffen in Kants Theorie sinnlicher Synthesis*. Frankfurt: Vittorio Klostermann.
- Grüne, S. (2011). Is there a Gap in Kant's B Deduction?. *International Journal of Philosophical Studies*, 19(3), 465-490.
- Grüne, S. (2017). Givenness, Objective Reality, and A Priori Intuitions. *Journal of the History of Philosophy*, 55(1), 113-130.
- Guyer, P. (1980). Kant on Apperception and "A Priori" Synthesis. *American Philosophical Quarterly*, 17(3), 205-212.

- Guyer, P. (1987). *Kant and the Claims of Knowledge*. Cambridge University Press.
- Guyer, P. (1992). The Transcendental Deduction of the Categories. In P. Guyer (Ed). *The Cambridge Companion to Kant*. Cambridge: Cambridge University Press.
- Guyer, P. (2006). *Kant*. New York: Routledge.
- Guyer, P. (2009). *Knowledge, Reason, and Taste: Kant's Response to Hume*. Princeton University Press.
- Guyer, P. (2010). The Deduction of Categories: the Metaphysical and Transcendental Deductions. In P. Guyer (Ed). *The Cambridge Companion to Critique of Pure Reason*. Cambridge: Cambridge University Press.
- Haag, J. (2007). *Erfahrung und Gegenstand: Das Verhältnis von Sinnlichkeit und Verstand*. Frankfurt am Main: Klostermann.
- Hanna, R. (2001). *Kant and the Foundations of Analytic Philosophy*. Oxford: Clarendon Press.
- Hanna, R. (2011). Kant's Non-Conceptualism, Rogue Objects, and the Gap in the B Deduction. *International Journal of Philosophical Studies*, 19(3), 399-415.
- Hartmann, N. (1921). *Grundzüge einer Metaphysik der Erkenntnis*. Berlin: de Gruyter
- Heidegger, Martin (1929). *Kant und das Problem der Metaphysik*. Bonn: Cohen.
- Heimsoeth, H. (1956). *Studien Zur Philosophie Immanuel Kant: Metaphysische Ursprünge Und Ontologische Grundlagen*. Köln: Univ.-Verl.
- Henrich, D. (1969). The proof-structure of Kant's Transcendental Deduction. *The Review of Metaphysics*, 22(4), 640-659.
- Henrich, D. (1981). Die Beweisstruktur der transzendentalen Deduktion der reinen Verstandesbegriffe-eine Diskussion mit Dieter Henrich. *Probleme der "Kritik der reinen Vernunft"*, 34-96.
- Henrich, D. (1989a). Kant's Notion of a Deduction and the Methodological Background of the First Critique. In E. Förster. (Ed.). *Kant's Transcendental Deductions*. Stanford: Stanford University Press.
- Henrich, D. (1989b). The Identity of the Subject in the Transcendental Deduction. *Reading Kant: New Perspectives on Transcendental Arguments and Critical Philosophy*. Oxford: Blackwell, 250-287.

- Henrich, D. (1992). The Origins of the Theory of the Subject. *Philosophical Interventions in the Unfinished Project of Enlightenment*, 29-87.
- Henrich, D. (1994). *The Unity of Reason: Essays on Kant's philosophy*. Harvard University Press.
- Henrich, D. (2008). *Between Kant and Hegel*. Harvard University Press.
- Hossack, K. (2007). *The Metaphysics of Knowledge*. Oxford University Press on Demand.
- Jolley, N. (1998). Causality and Creation in Leibniz. *The monist*, 81(4), 591-611.
- Jolley, N. (1998). *The Light of the Soul: Theories of Ideas in Leibniz, Malebranche, and Descartes*. Oxford University Press on Demand.
- Kitcher, P. (1990). *Kant's Transcendental Psychology*. New York: Oxford University Press.
- Klass, G. (2003). A framework for reading Kant on apperception: Seven interpretive questions. *Kant-Studien*, 94(2003), 80-94.
- Land, T. (2015). Nonconceptualist readings of Kant and the transcendental deduction. *Kantian Review*, 20(1), 25-51.
- Langton, R. (1998). *Kantian Humility: Our Ignorance of Things in Themselves*. Oxford University Press.
- Linsky, B., & Zalta, E. N. (1995). Naturalized Platonism versus Platonized naturalism. *The Journal of Philosophy*, 92(10), 525-555.
- Longuenesse, B. (1998). *Kant and the capacity to judge: Sensibility and Discursivity in the transcendental analytic of the critique of pure reason*. Princeton University Press.
- Longuenesse, B. (2006). Kant on a priori concepts: The metaphysical deduction of the categories. In *The Cambridge Companion to Kant and modern philosophy*. Cambridge University Press.
- Longuenesse, B. (2017). *I, Me, Mine: Back to Kant, and Back Again*. Oxford University Press.
- Mates, B. (1989). *The Philosophy of Leibniz: Metaphysics and Language*. Oxford University Press on Demand.
- Menn, S. (2002). *Descartes and Augustine*. Cambridge University Press.
- McLear, C. (2014). The Kantian (Non)-conceptualism Debate. *Philosophy Compass*, 9(11), 769-790.
- Owen, D. (1999). *Hume's Reason*. Oxford University Press on Demand.

- Pereboom, D. (1995). Self-understanding in Kant's transcendental deduction. *Synthese*, 103(1), 1-42.
- Prauss, G. (1971). *Erscheinung bei Kant*. Walter de Gruyter.
- Puryear, S. M. (2006). *Perception and Representation in Leibniz* (Doctoral dissertation, University of Pittsburgh).
- Rosefeldt, T. (2000). Das logische Ich. *Kant über den Gehalt des Begriffes von sich selbst*. Berlin: Philo Verlag.
- Rosefeldt, T. (2007). Dinge an sich und sekundäre Qualitäten. *Kant in der Gegenwart*, 167-209.
- Rosefeldt, T. (2007). Kant on Representation and Objectivity. *Philosophical Review* 116(3), 468–470.
- Rosefeldt, T. (2013). Die 36 Jahre der Philosophie. Zum transzendentalphilosophischen Potential von Kants Inauguraldissertation; in: J. Haag, M. Wild (Hrsg.), *Übergänge - diskursiv oder intuitiv. Essays zu Eckart Försters 'Die 25 Jahre der Philosophie'*, Frankfurt a.M.: Klostermann 2013, S. 23-38.
- Rosefeldt, T. (forthcoming). Kant and the epistemic role of the imagination. Available from: https://www.academia.edu/36005681/Kant_and_the_epistemic_role_of_the_imagination.
- Russell, B. (1992). *The philosophy of Leibniz*. Routledge.
- Sellars, W. (1968). *Science and Metaphysics: Variations on Kantian Themes*. New York: Humanities Press.
- Schulking, D. (2017). *Kant's Radical Subjectivism: Perspectives on the Transcendental Deduction*. Springer.
- Sosa, E. (1980). The raft and the pyramid: Coherence versus foundations in the theory of knowledge. *Midwest studies in philosophy*, 5(1), 3-26.
- Stang, N. F. (2016). *Kant's Modal Metaphysics*. Oxford University Press.
- Strawson, P. F. (1959). *Individuals*. London: Routledge, 2010.
- Strawson, P. F. (1966). *The Bounds of Sense*. London: Routledge, 2005.
- Strawson, P. F. (1959). *Individuals*. London: Routledge 1990.
- Stroud, B. (1968). Transcendental arguments. *The Journal of Philosophy*, 65(9), 241-256.
- Tester, S. (2014). *Kant's Metaphysics of Mind and Rational Psychology*. Hochschulschrift: Berlin, Humboldt-Univ., Diss., 2014

- Thiel, U. (2011). *The Early Modern Subject: Self-consciousness and Personal Identity from Descartes to Hume*. Oxford University Press on Demand.
- Thöle, B. (1991). *Kant und das Problem der Gesetzmäßigkeit der Natur* (Vol. 27). Walter de Gruyter.
- Van Cleve, J. (1999). *Problems from Kant*. Oxford University Press.
- Van Cleve, J. (2015). *Problems from Reid*. Oxford University Press.
- De Vleeschauwer, H.J. (1962). *The Development of Kantian Thought*. (A.R.C. Duncan, Trans.). Edinburgh: Thos. Nelson.
- Vinci, T. C. (2014). *Space, Geometry, and Kant's Transcendental Deduction of the Categories*. Oxford University Press.
- Watkins, E. (2005). *Kant and the Metaphysics of Causality*. Cambridge University Press.
- Winkler, K. P. (2010). Kant, the Empiricists, and the Enterprise of Deduction. *The Cambridge Companion to Kant's Critique of Pure Reason*, 41-72.
- Wolff, R. P. (1963). *Kant's Theory of Mental Activity*. Cambridge (Mass.).
- Wunderlich, F. (2011). *Kant und die Bewußtseinstheorien des 18. Jahrhunderts* (Vol. 64). Walter de Gruyter.
- Wundt, M. (1924). *Kant als Metaphysiker*. Stuttgart: Ferdinand Enke, 1924.
- Wundt, M. (1941). Die Wiederentdeckung Platons im 18. Jahrhundert. *Blätter für deutsche Philosophie*, 15, 149-158.
- Zöller, G. (1989). From innate to a priori: Kant's radical transformation of a Cartesian-Leibnizian legacy. *The Monist*, 72(2), 222-235.